

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE

BOROUGH OF CREWE

BY

G. GRANVILLE BUCKLEY, M.D., D.P.H.,

Medical Officer of Health, and

Medical Superintendent of Borough Isolation Hospitals.

1908.

CREWE :

WILMOT EARDLEY, LIMITED, BOROUGH PRINTING OFFICES.

BOROUGH OF CREWE.

HEALTH COMMITTEE,

1907—1908.

Chairman :

HIS WORSHIP THE MAYOR (ALDERMAN H. HOPTROFF).

Members :

ALDERMAN A. H. BADGER.

„ W. MCNEILL.

COUNCILLOR G. BAILEY.

COUNCILLOR F. MANNING.

„ J. BOOTH.

„ J. NIXON.

„ D. FROGGATT.

„ R. D. SHARPE.

„ A. JERVIS.

„ E. VAUGHAN.

„ F. HEMMINGS (deceased) „

JESSE WILLIAMS.

„ JOSEPH JONES.

„ W. WILLIAMS.

„ J. KNOTT.

„ C. R. WOOLDRIDGE

Health Department,

Municipal Offices, Crewe,

March 17th, 1909.

*To the Chairman and Members of the
Health Committee.*

Gentlemen,

I have the honour of submitting for your consideration my Annual Report on the Health of the Borough and the Administration of the Health Department during the year 1908.

In this Report I have followed, as closely as possible, the arrangement adopted by my predecessor, in order to render the various statistics, etc., more easily comparable.

All the principal mortality rates, with the exception of the Zymotic Death Rate, are lower than last year, and the same remark applies to the Birth Rate, which has undergone a considerable reduction. The Zymotic Death Rate has increased very slightly.


As I have only acted as your Medical Officer of Health during the last six months of the year under review, a few important matters, such as the epidemic of Scarlet Fever, which commenced in 1907 and extended to the first few months of 1908, are hardly treated so fully as they deserve.

I must tender my thanks to the members of the staff for their willing assistance.

I am, Gentlemen,

Your obedient Servant,

G. GRANVILLE BUCKLEY.



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Part i.

Statistical.

Statistical Summary, 1908.

| | | |
|---|----------|--------|
| Area of Borough | 2,185 | acres. |
| Population at Census, 1901 | 42,074 | |
| Estimated population to middle of 1908 | 48,359 | |
| | 1907 | 1908 |
| Average number of persons per acre | 21.9 | 22.1 |
| Birth-rate per 1,000 living | 26.1 | 24.6 |
| Death-rate | 11.1 | 11.06 |
| Death-rate from Zymotic diseases | 0.79 | 0.90 |
| Phthisis Death-rate | 0.5 | 0.4 |
| Infant mortality, per 1,000 births | 108 | 103 |
| Total occupied houses | 10,001 | 10,096 |
| Plans of new buildings passed | 91 | 60 |
| Assessable Value (General District Rate) | £158,511 | 17 6 |
| Rateable Value (Borough Rate) | £169,586 | 0 0 |
| Amount raised by 1d. Rate | £640 | 0 0 |

Charter of Incorporation granted April 27th, 1877.

Commission of the Peace granted April 7th, 1881.

Adoptive Acts in force in Crewe.

- Infectious Diseases (Prevention) Act, 1890, adopted January, 1891.
 Public Health Act Amendment Act, 1890, adopted February, 1891.
 Infectious Diseases (Notification) Act, 1889, adopted October, 1896.

Geology.

The soil upon which Crewe and the neighbouring villages are built consists wholly of drift deposit. The whole of the Borough is built upon a re-deposited boulder clay (red, blue and yellow brick clays), intersected here and there with irregular lines and pockets of sand and gravel, probably the remains of old river and brook courses.

This clay deposit and an underlying bed of stratified clay lie in a hollow of stratified drift sand, and attain a depth of from 12 to 100 feet.

The drift sand rises to the surface in a bay-like curve in the outlying villages of Wistaston, Shavington, Weston, Crewe Green, and Haslington.

The whole of these deposits appear to be laid in a deep hollow in the Keuper; a brook which passes through the centre of the Borough, appearing to have cut down to this formation.

Elevation.

The Borough is situated upon the Valley Brook, a tributary of the river Weaver. The mean elevation is about 170 feet above sea level, and varies from 113 feet at the lowest part of the Sewage Farm to 200 feet at Hightown.

HEIGHT ABOVE SEA LEVEL.

| | |
|---|-----------|
| Sewage Farm (West of Queen's Park) | 113 feet. |
| The Valley | 145 „ |
| Market Square (South-West corner) | 184 „ |
| Isolation Hospital | 182 „ |
| Nantwich Road (East end) | 188 „ |
| Hightown (St. Paul's Church—North side) ... | 200 „ |

Area.

The Borough has a total area of 2,185 acres, comprising the Civil Parish of Monks Coppenhall and parts of the Civil Parishes of Church Coppenhall, Shavington-cum-Gresty, and Wistaston, the three last named parts being added on 24th March, 1894, by Order of the Local Government Board.

Density.

The average density of the Borough is equal to 22.1 persons to the acre.

Population.

The estimated population at the middle of 1908 was 48,359. This estimate is based upon the number of inhabited houses as ascertained from the rate-books, and the average number of persons per house at the last census. This method of estimating the population differs from that of the Registrar General, who assumes that the same annual rate of increase will be maintained from 1901 to the next census in 1911, as existed in the period 1891 to 1901. The population as estimated by this method was 49,185 at the middle of 1908.

Both methods are subject to error, which increases with the length of time from the last census. The first method is probably best suited for our purposes, although one factor (the average number of persons per house) varies from year to year. At the census of 1891 it was 5.011, and in 1901 it was 4.79. During times of depression in trade, when wages are low, the average house population increases (by two families occupying one house, etc.), and the number of inhabited houses is diminished, with the result that there is shown an apparent check on the increase of the population.

The distribution of the population in the four wards is shewn below:—

| Ward. | | Population at Census, 1901. | Estimated Population. | | |
|---------|-----|--------------------------------|-----------------------|----------|--------|
| | | | Males. | Females. | Total. |
| Central | ... | 9,349 | 5,450 | 5,297 | 10,747 |
| West | ... | 9,464 | 5,679 | 5,199 | 10,878 |
| North | ... | 10,160 | 5,962 | 5,714 | 11,676 |
| South | ... | 13,101 | 7,726 | 7,332 | 15,058 |
| Borough | ... | 42,074 | 24,817 | 23,542 | 48,359 |

Housing.

The Assistant Overseer (Mr. A. Maywhort) has kindly allowed me to extract from the rate books the following information with regard to the total number of houses, and the number of unoccupied houses, and their rateable values:—

Number of Houses on the Rate Book, September 30th, 1908.

| | | |
|------------------------------------|-----------------|--------|
| Houses rated under | £5 per annum... | 198 |
| „ „ at £5 and under £10 „ „ | | 6,955 |
| „ „ £10 „ £20 „ „ | | 2,668 |
| „ „ £20 „ £30 „ „ | | 311 |
| „ „ £30 „ £40 „ „ | | 93 |
| „ „ £40 „ £50 „ „ | | 68 |
| „ „ £50 „ £60 „ „ | | 20 |
| „ „ £60 „ £70 „ „ | | 11 |
| „ „ £70 „ £80 „ „ | | 7 |
| „ „ £80 „ £90 „ „ | | 11 |
| „ „ £90 „ £100 „ „ | | 5 |
| „ „ £100 „ £200 „ „ | | 25 |
| „ „ at £200 and above „ „ | | 8 |
| Total | | 10,380 |

From this it will be seen that 94.6 per cent. of the houses are rated at less than £20, and 68.9 per cent. at less than £10 per annum.

| | |
|--|----|
| Houses rated at £5 and under £10 shew an increase of | 18 |
| „ „ £10 „ £20 „ „ | 39 |
| „ „ £20 „ £30 „ „ | 1 |

The number of houses at other valuations remains the same.

Empty Houses.

| RATEABLE VALUE. | Under £5 | £5, and under £10. | £10, and under £20. | £20, and under £30. | £30, and under £80. | £80, and over. | TOTAL |
|--|----------|--------------------|---------------------|---------------------|---------------------|----------------|-------|
| Central Ward | ... | 52 | 14 | 12 | 5 | ... | 83 |
| West Ward | 2 | 76 | 4 | 2 | 2 | ... | 86 |
| North Ward | 4 | 71 | 2 | 1 | ... | ... | 78 |
| South Ward | 2 | 17 | 16 | 2 | ... | ... | 37 |
| Borough of Crewe ... | 8 | 216 | 36 | 17 | 7 | ... | 284 |
| Empty Houses, per cent. of Houses on Rate Books in each group. | 4.0 | 3.1 | 1.3 | 5.1 | 3.5 | ... | 2.7 |

There are 37 fewer empty houses than in 1907.

The following figures denote the percentage of empty houses to total houses on the rate books for the last fifteen years:—

| | | | |
|----------|-----|----------|-----|
| 1894 ... | 2.0 | 1901 ... | 3.3 |
| 1895 ... | 2.4 | 1902 ... | 3.0 |
| 1896 ... | 2.8 | 1903 ... | 2.6 |
| 1897 ... | 2.6 | 1904 ... | 4.2 |
| 1898 ... | 2.7 | 1905 ... | 4.4 |
| 1899 ... | 2.2 | 1906 ... | 4.2 |
| 1900 ... | 2.6 | 1907 ... | 3.1 |
| 1908 ... | 2.7 | | |

New Houses.

In the columns shown below are given the number of plans passed every year since 1891, and the number of habitation certificates granted since 1897.

The number of plans passed and the number of habitation certificates granted are the lowest yet recorded.

| | | | | | | |
|--------------|------|-----|-----|-----|-----|-----|
| Plans passed | 1891 | ... | ... | ... | ... | 139 |
| " | 1892 | ... | ... | ... | ... | 169 |
| " | 1893 | ... | ... | ... | ... | 157 |
| " | 1894 | ... | ... | ... | ... | 238 |
| " | 1895 | ... | ... | ... | ... | 283 |
| " | 1896 | ... | ... | ... | ... | 317 |
| " | 1897 | ... | ... | ... | ... | 441 |
| " | 1898 | ... | ... | ... | ... | 308 |
| " | 1899 | ... | ... | ... | ... | 385 |
| " | 1900 | ... | ... | ... | ... | 201 |
| " | 1901 | ... | ... | ... | ... | 243 |
| " | 1902 | ... | ... | ... | ... | 400 |
| " | 1903 | ... | ... | ... | ... | 225 |
| " | 1904 | ... | ... | ... | ... | 157 |
| " | 1905 | ... | ... | ... | ... | 89 |
| " | 1906 | ... | ... | ... | ... | 100 |
| " | 1907 | ... | ... | ... | ... | 91 |
| " | 1908 | ... | ... | ... | ... | 60 |

Habitation Certificates:—

| | | | | | |
|---|---|------------------|-----|-----|-----|
| " | " | 1897 (11 months) | ... | ... | 234 |
| " | " | 1898 | ... | ... | 327 |
| " | " | 1899 | ... | ... | 248 |
| " | " | 1900 | ... | ... | 230 |
| " | " | 1901 | ... | ... | 226 |
| " | " | 1902 | ... | ... | 257 |
| " | " | 1903 | ... | ... | 304 |
| " | " | 1904 | ... | ... | 181 |
| " | " | 1905 | ... | ... | 135 |
| " | " | 1906 | ... | ... | 106 |
| " | " | 1907 | ... | ... | 64 |
| " | " | 1908 | ... | ... | 58 |

Marriages.

The number of marriages during the year was 232, of which 172 took place in the Established Churches, and 60 in the Nonconformist and Catholic places of worship.

| Year. | No. of Marriages. | | Marriage-rate. | Marriage-rate in England and Wales. | |
|-------|-------------------|-----|----------------|--|-----|
| 1897 | ... | 244 | ... | 12.64 | ... |
| 1898 | ... | 272 | ... | 13.76 | ... |
| 1899 | ... | 315 | ... | 15.56 | ... |
| 1900 | ... | 304 | ... | 14.68 | ... |
| 1901 | ... | 250 | ... | 11.80 | ... |
| 1902 | ... | 310 | ... | 14.32 | ... |
| 1903 | ... | 297 | ... | 13.05 | ... |
| 1904 | ... | 242 | ... | 10.50 | ... |
| 1905 | ... | 261 | ... | 11.2 | ... |
| 1906 | ... | 285 | ... | 12.0 | ... |
| 1907 | ... | 313 | ... | 13.0 | ... |
| 1908 | ... | 232 | ... | 9.4 | ... |

Births.

The total number of births registered within the Borough during 1908 was 1,193, of which number 573 were males and 620 females.

The birth-rate per 1,000 of the population was 24.6, being 1.5 per 1,000 lower than 1907.

The birth-rate for England and Wales in 1908 was 26.5 per 1,000 of the population, and is slightly higher than last year.

Of the births registered 36 or 3.01 per cent. were illegitimate, as compared with 42 or 3.3 per cent in 1907.

The following figures in parallel columns shew the birth-rate in the Borough of Crewe as compared with the rest of the country since 1893:—

| Year | Crewe. | | England & Wales. | |
|------|--------|------|------------------|------|
| 1893 | ... | 35.2 | ... | 30.7 |
| 1894 | ... | 33.9 | ... | 29.6 |
| 1895 | ... | 33.6 | ... | 30.3 |
| 1896 | ... | 31.8 | ... | 29.6 |
| 1897 | ... | 33.1 | ... | 29.6 |
| 1898 | ... | 34.5 | ... | 29.3 |
| 1899 | ... | 34.6 | ... | 29.1 |
| 1900 | ... | 34.3 | ... | 28.7 |
| 1901 | ... | 30.9 | ... | 28.5 |
| 1902 | ... | 32.6 | ... | 28.6 |
| 1903 | ... | 31.9 | ... | 28.4 |
| 1904 | ... | 30.9 | ... | 27.9 |
| 1905 | ... | 28.2 | ... | 27.2 |
| 1906 | ... | 26.7 | ... | 27.0 |
| 1907 | ... | 26.1 | ... | 26.3 |
| 1908 | ... | 24.6 | ... | 26.5 |

From these figures it is seen that Crewe shares the steady diminution in the birth-rate with the rest of the country. The fall has been specially abrupt during the last two or three years, so that instead of being above that of the country generally the birth-rate of the Borough is now even lower than that of the country as a whole. The birth-rate is the lowest recorded in any year, and the number of births registered is **58** lower than the preceding year.

The natural increase of the population, or the number by which the births exceed the deaths, shews a diminution owing to the even greater proportionate fall in the number of births.

| Year. | Births. | Deaths. | Natural increase. |
|-------|---------|---------|-------------------|
| 1893 | 1,228 | 694 | 534 |
| 1894 | 1,215 | 520 | 695 |
| 1895 | 1,237 | 608 | 629 |
| 1896 | 1,200 | 568 | 632 |
| 1897 | 1,278 | 627 | 651 |
| 1898 | 1,365 | 699 | 666 |
| 1899 | 1,400 | 695 | 705 |
| 1900 | 1,420 | 677 | 743 |
| 1901 | 1,311 | 710 | 601 |
| 1902 | 1,412 | 648 | 764 |
| 1903 | 1,454 | 651 | 803 |
| 1904 | 1,425 | 673 | 752 |
| 1905 | 1,318 | 629 | 689 |
| 1906 | 1,260 | 560 | 700 |
| 1907 | 1,251 | 536 | 715 |
| 1908 | 1,193 | 535 | 658 |

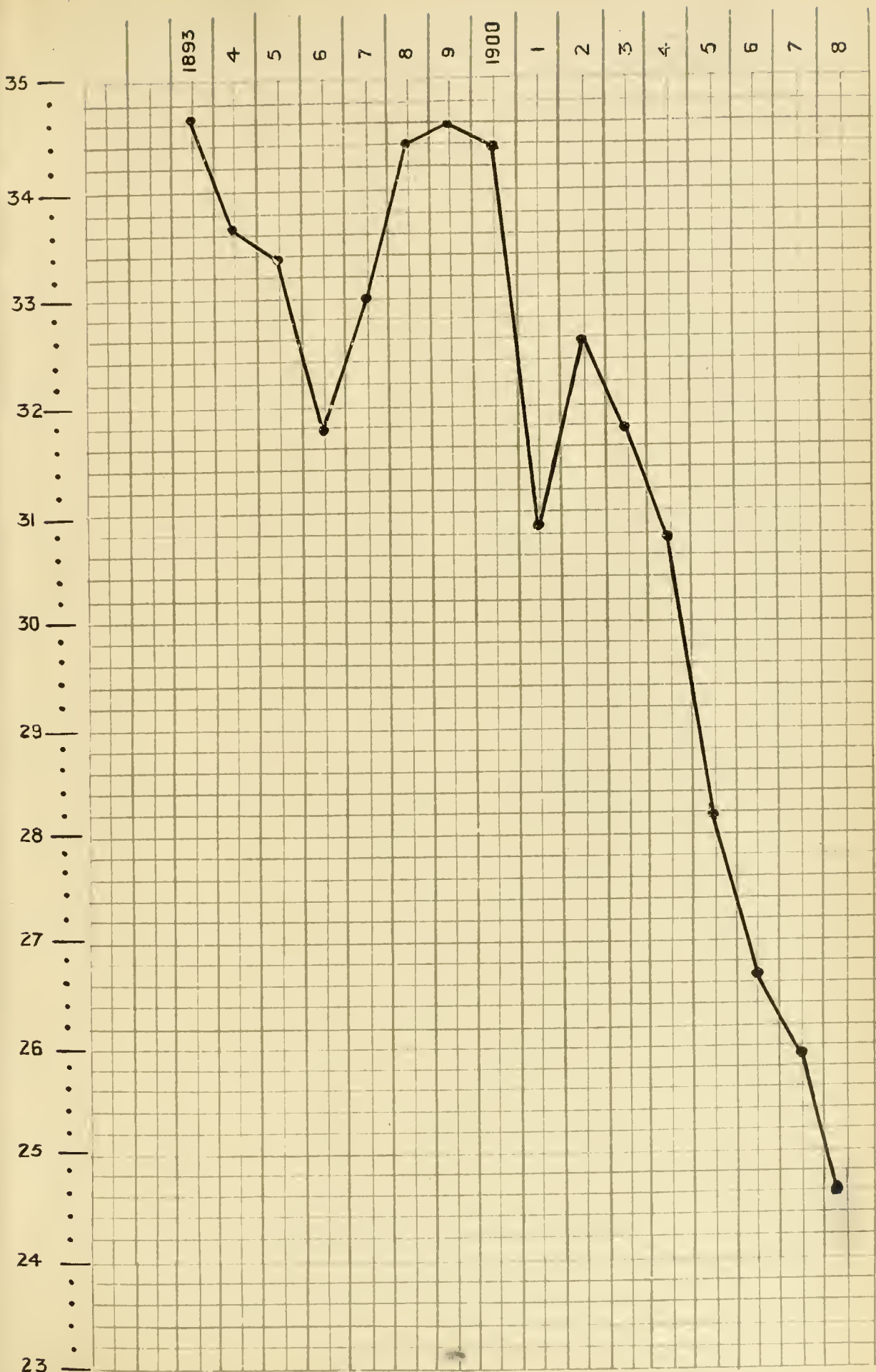
Deaths.

The total number of deaths registered within the Borough during 1908 was 514, giving a *gross* death-rate of 10.6 per 1,000.

Of the 514 deaths 262 were of males, and 252 of females.

Six of the deaths were of persons belonging to other districts, and must therefore be deducted; while 27 deaths of persons belonging to the Borough, but who died outside, must be added. This gives a correct number of 535 and a *corrected* death-rate of 11.06 per 1,000.

This represents a fall of 3.7 per 1,000 below the average death-rate of the last ten years, and is 0.04 per 1,000 lower than the record death-rate of last year.



*Birth Rates per 1000 persons living for
the Years 1893 - 1908.*

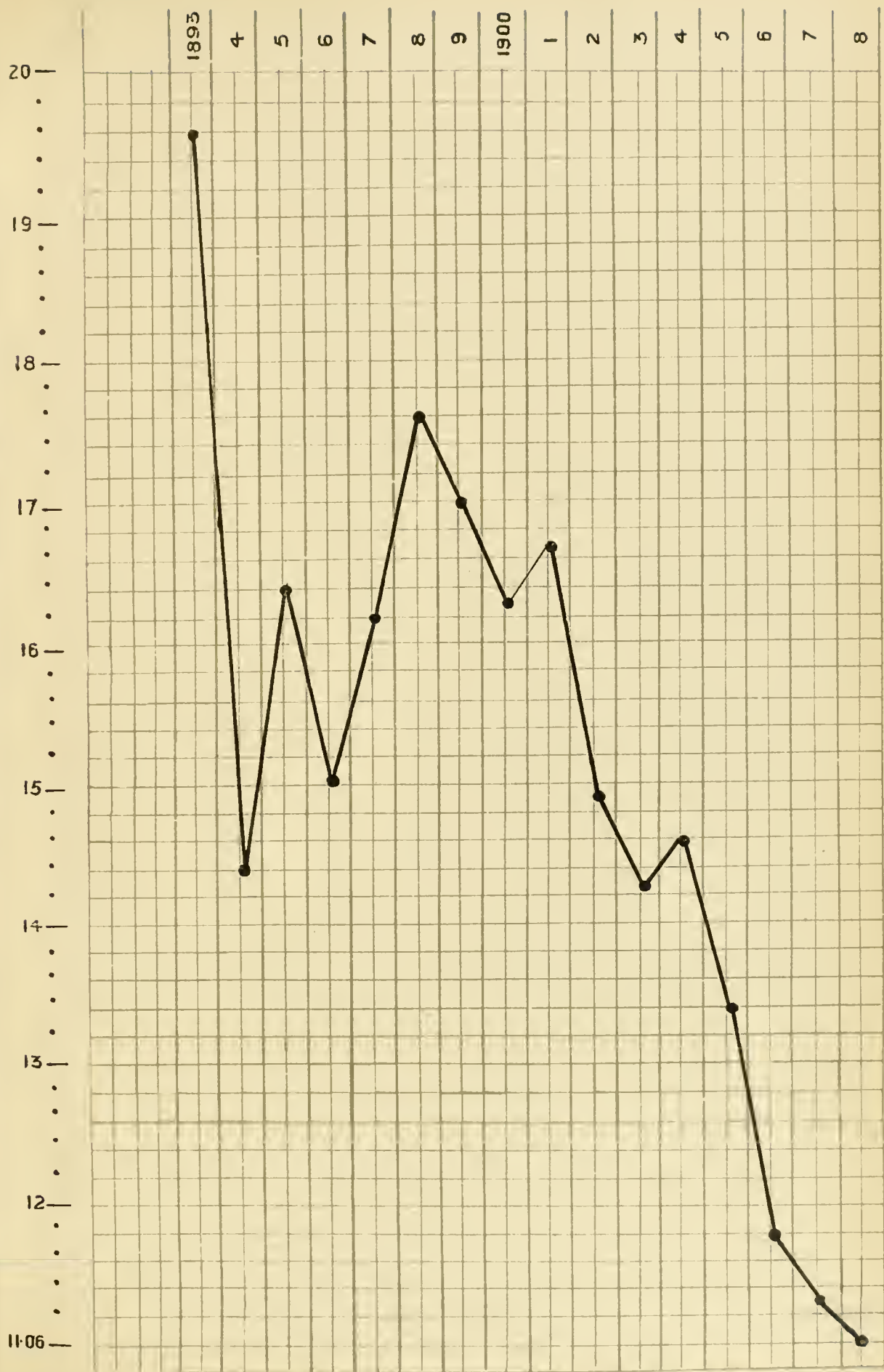
In England and Wales the death-rate in 1908 was 14.7 per 1,000. The rates in the 76 large towns and the 142 smaller towns, were respectively 15.7 and 14.7.

For the purpose of comparing the position of Crewe with that of other towns of about the same population the following table has been prepared. It is interesting to make such a comparison not only with working communities, but also with health resorts, and one or two of these are included in the table.

| | Population estimated to middle of 1908 | Birth-rate per 1,000. | Death-rate per 1,000. | Zymotic Death- rate. | Respiratory Death-rate. | Phthisis Death-rate. | Deaths from other forms of Tuberculosis. | Infant Deaths per 1,000 Births. |
|----------------------------------|--|--------------------------|--------------------------|-------------------------|----------------------------|-------------------------|--|---------------------------------------|
| England and Wales ... | 35,348,780 | 26.5 | 14.7 | 1.29 | ... | ... | ... | 121 |
| Accrington ... | 46,000 | 22.0 | 14.39 | 1.82 | 2.58 | .78 | .50 | 137 |
| Acton ... | 55,000 | 28.8 | 13.1 | 2.2 | 3.2 | 1 | .5 | 119 |
| Blackpool ... | 59,741 | 17.54 | 12.72 | 1.12 | 1.77 | 0.79 | 0.28 | 127 |
| Burton-on-Trent | 53,000 | 22.4 | 12.90 | 1.0 | 1.7 | 1.28 | 0.45 | 111 |
| Bootle ... | 70,500 | 30.9 | 17.3 | 2.3 | ... | 1.4 | ... | 143 |
| Cambridge ... | 40,118 | 19.7 | 15.0 | 1.99 | 2.01 | 1.09 | 0.49 | 135 |
| Colchester ... | 41,450 | 23.55 | 12.35 | 0.82 | ... | 1.13 | 0.26 | 90 |
| Darwen ... | 42,266 | 21.17 | 13.01 | 0.76 | 2.34 | 0.59 | 0.35 | 120 |
| Eccles ... | 40,000 | 27.0 | 13.9 | 1.5 | 2.9 | 0.75 | 0.22 | 119 |
| Gloucester ... | 53,176 | 23.9 | 12.6 | 1.11 | 1.97 | 0.94 | 0.39 | 113 |
| Keighley ... | 45,720 | 20.6 | 14.58 | 1.83 | 2.44 | 1.09 | .34 | 134 |
| Rotherham ... | 64,000 | 32.75 | 15.62 | — | 2.78 | .97 | .47 | 149 |
| Stockton-on-Tees | 54,242 | 31.11 | 17.60 | 2.72 | 2.61 | 1.21 | 1.03 | 150 |
| Wakefield ... | 43,611 | 24.1 | 15.3 | 1.39 | 2.56 | 1.33 | 0.25 | 135 |
| Wimbledon ... | 54,274 | 21.07 | 8.3 | 0.55 | 1.41 | 0.68 | 0.27 | 71 |
| CREWE ... | 48,359 | 24.6 | 11.06 | 0.90 | 2.15 | 0.4 | 0.4 | 103 |

The following Table indicates the actual number of **Deaths** in each Quarter, and the **Death-rate** of previous years. It shows that the mortality in each year is much below the average of the last ten years.

| YEAR. | 1st Quarter. | 2nd Quarter. | 3rd Quarter. | 4th Quarter. | Whole year. | Death-rate for whole year. |
|--------------------|-----------------|-----------------|-----------------|-----------------|----------------|----------------------------------|
| 1898... | 196 | 164 | 190 | 149 | 699 | 17·6 |
| 1899... | 209 | 142 | 182 | 162 | 695 | 17·1 |
| 1900... | 212 | 159 | 148 | 158 | 677 | 16·3 |
| 1901... | 156 | 163 | 193 | 198 | 710 | 16·7 |
| 1902... | 173 | 161 | 135 | 179 | 648 | 14·9 |
| 1903... | 173 | 151 | 166 | 161 | 651 | 14·3 |
| 1904... | 159 | 145 | 171 | 198 | 673 | 14·6 |
| 1905... | 190 | 163 | 129 | 147 | 629 | 13·5 |
| 1906... | 147 | 117 | 138 | 158 | 560 | 11·8 |
| 1907... | 150 | 117 | 116 | 153 | 536 | 11·1 |
| Mean— 10 years} | 176 | 148 | 156 | 166 | 647 | 14·7 |
| 1908... | 156 | 117 | 124 | 138 | 535 | 11·06 |



*Death Rates per 1000 persons living for
the Years 1893 - 1908.*

THE PRINCIPAL CAUSES OF DEATH.—These are shewn in the following summary, while the figures for 1907 are also given for comparison :—

| | 1907. | 1908. |
|---|-------|-------|
| Diseases of the Respiratory Organs (excluding Consumption) | 110 | 104 |
| Tubercular Diseases (including Consumption) | 53 | 42 |
| Diseases of the Circulatory system | 52 | 62 |
| Malignant Diseases (Cancer, etc.) | 40 | 31 |
| Diarrhœa and Enteritis | 19 | 34 |
| Premature Birth | 28 | 18 |
| Measles... .. | 2 | 7 |

MORTALITY AT VARIOUS AGES.—The number of deaths occurring at varying periods of life is shewn below, as well as the average mortality of each age period during the last ten years.

| AGE GROUPS. | 1898 | 1899 | 1900 | 1901 | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | Average for 10 yrs. | 1908 |
|--------------------|------|------|------|------|------|------|------|------|------|------|---------------------|------|
| Under 1 year ... | 232 | 231 | 196 | 238 | 186 | 211 | 228 | 173 | 149 | 136 | 198 | 124 |
| 1 and under 5 ... | 100 | 87 | 68 | 81 | 81 | 72 | 89 | 92 | 66 | 54 | 79 | 58 |
| 5 „ 15 ... | 20 | 30 | 34 | 36 | 28 | 22 | 29 | 22 | 29 | 25 | 27 | 14 |
| 15 „ 25 ... | 41 | 27 | 27 | 29 | 21 | 28 | 27 | 28 | 11 | 23 | 26 | 24 |
| 25 „ 65 ... | 190 | 184 | 232 | 192 | 198 | 189 | 179 | 177 | 173 | 172 | 188 | 194 |
| 65 and upwards ... | 116 | 136 | 120 | 134 | 134 | 129 | 121 | 137 | 132 | 126 | 128 | 121 |
| All Ages... | 699 | 695 | 677 | 710 | 648 | 651 | 673 | 629 | 560 | 536 | 647 | 535 |

WARD DISTRIBUTION OF MORTALITY.—The following table gives the number of deaths and the death-rate in each of the Wards. The total number of deaths does not agree with that in some of the other tables on account of the fact that the addresses of residents who died in the Workhouse could not be ascertained, and therefore could not be allocated to their proper Wards. The total number of deaths in the Workhouse last year was 24.

| | | Central Ward. | West Ward. | North Ward. | South Ward. |
|----------------------|--------|------------------|---------------|----------------|----------------|
| Under 1 year | ... .. | 23 | 44 | 18 | 36 |
| 1 and under 5 | ... .. | 11 | 14 | 19 | 14 |
| 5 and under 15 | ... .. | 1 | 6 | 3 | 4 |
| 15 and under 25 | ... .. | 3 | 6 | 10 | 5 |
| 25 and under 65 | ... .. | 45 | 43 | 40 | 55 |
| 65 and upwards... | ... .. | 23 | 27 | 22 | 39 |
| All ages | ... .. | 106 | 140 | 112 | 153 |
| Death-rate per 1,000 | ... .. | 9·8 | 12·8 | 9·5 | 10·1 |

Mortality in Relation to Season.

| Month. | Total No. of deaths. | Death- rate. | Deaths under 1 year. | Infantile death rate. |
|-------------|-------------------------|-----------------|----------------------------|--------------------------|
| January ... | 47 | 11·6 | 11 | 110 |
| February... | 54 | 13·3 | 8 | 82 |
| March ... | 55 | 13·6 | 14 | 140 |
| April ... | 55 | 13·6 | 13 | 130 |
| May ... | 28 | 6·9 | 9 | 90 |
| June ... | 34 | 8·4 | 11 | 110 |
| July ... | 30 | 7·4 | 4 | 41 |
| August ... | 43 | 10·6 | 9 | 90 |
| September | 51 | 12·6 | 14 | 140 |
| October ... | 45 | 10·9 | 13 | 130 |
| November | 52 | 12·9 | 12 | 120 |
| December | 41 | 10·1 | 6 | 60 |
| Whole year | 535 | 11·06 | 124 | 103 |

INFANTILE MORTALITY.—The number of deaths registered of children under one year of age was 124, as compared with 136 in the preceding year. The proportion of deaths to every 1,000 children born during the year was 103, against 108 for 1907. This is the lowest infantile death-rate yet recorded. The rate for England and Wales was 121 per 1,000 births, which is an increase of 3 per 1,000 upon 1907. In the 76 large towns it was 128 per 1,000 births, and in the 142 smaller towns (of which Crewe is one), the rate was 124 per 1,000 births.

The extremely low mortality was due to a reduction in the recorded number of deaths from respiratory and tubercular diseases, premature birth and whooping-cough. The number of deaths from diarrhoeal diseases shows an increase of over 50 per cent.

The Health Committee have had under consideration the question of adopting the Notification of Births Act, 1907. Owing, however, to the fact that no provision existed for visiting any cases which might be notified, it was decided not to adopt the Act for the present. The Committee agreed to the suggestion that a supply of cards of instruction on Infant Feeding should be given to each Midwife in the Borough for distribution to her patients.

The chief causes of death among infants are stated below.

| | 1905. | 1906. | 1907. | 1908. |
|--------------------------|-------|-------|-------|-------|
| Diarrhœal Diseases ... | 22 | 35 | 14 | 23 |
| Respiratory Diseases ... | 30 | 23 | 28 | 25 |
| Tubercular Diseases ... | 19 | 9 | 12 | 3 |
| Convulsions | 5 | 7 | 6 | 8 |
| Premature Birth ... | 23 | 27 | 28 | 18 |
| Debility and Wasting | 29 | 20 | 21 | 20 |
| Measles | 7 | 0 | 0 | 3 |
| Whooping Cough ... | 14 | 5 | 7 | 2 |
| Other Causes | 24 | 23 | 20 | 22 |
| TOTAL | 173 | 149 | 136 | 124 |

Of the total deaths 35 (or 28 per cent.) occurred during the first month. Of these 16 were prematurely born, the majority only surviving a few hours, and 4 were born with defects which were incompatible with life; 5 were not endowed with sufficient vitality to live longer than a month; 3 died from diarrhœal diseases, 2 from syphilis, 3 from convulsions, 1 from bronchitis, and 1 from some cause not specified.

The causes of, and ages at, death are set out in detail in Table V. at the end of the report.

Uncertified Deaths.

These are deaths the causes of which have not been certified by a medical practitioner or by the Coroner after inquest.

| Year. | Uncertified deaths. | | Percentage of total deaths. | |
|-------|------------------------|----|--------------------------------|------|
| 1893 | ... | 8 | ... | 1.1 |
| 1894 | ... | 8 | ... | 1.5 |
| 1895 | ... | 6 | ... | 0.98 |
| 1896 | ... | 4 | ... | 0.7 |
| 1897 | ... | 3 | ... | 0.4 |
| 1898 | ... | 3 | ... | 0.4 |
| 1899 | ... | 8 | ... | 1.1 |
| 1900 | ... | 10 | ... | 1.4 |
| 1901 | ... | 11 | ... | 1.5 |
| 1902 | ... | 3 | ... | 0.4 |
| 1903 | ... | 6 | ... | 0.9 |
| 1904 | ... | 3 | ... | 0.4 |
| 1905 | ... | 3 | ... | 0.4 |
| 1906 | ... | 1 | ... | 0.1 |
| 1907 | ... | 2 | ... | 0.3 |
| 1908 | ... | 6 | ... | 1.1 |

Still-born Children

The number of still-born children interred in the Cemetery and Coppenhall Churchyard during the year was 81 or 6.8 per cent. of the number of births; 33 were males and 35 females, and in 13 cases the sex was not stated.

| | | Total number. | Percentage of total births. | | | Total number. | Percentage of total births. |
|------|-----|------------------|--------------------------------|------|-----|------------------|--------------------------------|
| 1890 | ... | 36 | 3.9 | 1899 | ... | 63 | 4.5 |
| 1891 | ... | 30 | 3.0 | 1900 | ... | 55 | 3.8 |
| 1892 | ... | 51 | 4.8 | 1901 | ... | 63 | 4.8 |
| 1893 | ... | 48 | 3.9 | 1902 | ... | 86 | 6.0 |
| 1894 | ... | 37 | 3.0 | 1903 | ... | 64 | 4.4 |
| 1895 | ... | 71 | 5.8 | 1904 | ... | 75 | 5.2 |
| 1896 | ... | 65 | 5.4 | 1905 | ... | 69 | 5.2 |
| 1897 | ... | 56 | 4.2 | 1906 | ... | 78 | 6.1 |
| 1898 | ... | 56 | 4.1 | 1907 | ... | 72 | 5.7 |
| | | 1908 | ... | 81 | ... | 6.8 | |

List of streets in which six or more deaths occurred during the year 1908:—

| Class. | Name of Street. | | | No. of Deaths. |
|--------|-----------------------|-----|-----|----------------|
| 1 | West Street | ... | ... | 18 |
| 2 | { Edleston Road | ... | ... | } 13 |
| | { Nantwich Road | ... | ... | |
| 3 | { Beech Street | ... | ... | } 9 |
| | { Oakley Street | ... | ... | |
| | { Ramsbottom Street | ... | ... | |
| | { Walthall Street | ... | ... | |
| 4 | Cemetery Road | ... | ... | 8 |
| 5 | { Broad Street | ... | ... | } 7 |
| | { Middlewich Street | ... | ... | |
| | { Samuel Street | ... | ... | |
| 6 | { New Street | ... | ... | } 6 |
| | { Peel Street | ... | ... | |
| | { Richard Moon Street | ... | ... | |
| | { Ruskin Road | ... | ... | |
| | { Stafford Street | ... | ... | |
| | { Thomas Street | ... | ... | |

Coroner's Inquests.

INQUESTS were held by the Coroner as to the cause of death in 35 cases. These were eventually returned as due to Natural Causes in 16 cases, Accident or Negligence (such as falls, burns, overlying, improper feeding, etc.) in 14 cases, and Suicide in 5 cases.

The proportion of inquests per 1,000 deaths was 65.4, as compared with 67.1 in the year 1907.

The number of inquests held and the proportion per 1,000 deaths in each year is shewn below :—

| Year. | Number of Inquests. | | Proportion per 1,000 deaths. | |
|-------|---------------------|----|------------------------------|-------|
| 1893 | ... | 27 | ... | 38.9 |
| 1894 | ... | 30 | ... | 57.6 |
| 1895 | ... | 42 | ... | 69.07 |
| 1896 | ... | 34 | ... | 59.8 |
| 1897 | ... | 41 | ... | 66.4 |
| 1898 | ... | 54 | ... | 78.9 |
| 1899 | ... | 37 | ... | 53.2 |
| 1900 | ... | 49 | ... | 72.3 |
| 1901 | ... | 42 | ... | 59.1 |
| 1902 | ... | 34 | ... | 52.4 |
| 1903 | ... | 44 | ... | 69.1 |
| 1904 | ... | 45 | ... | 68.2 |
| 1905 | ... | 36 | ... | 54 |
| 1906 | ... | 35 | ... | 62.4 |
| 1907 | ... | 36 | ... | 67.1 |
| 1908 | ... | 35 | ... | 65.4 |

Particulars of Deaths of Illegitimate Children during 1908.

During the year six deaths among illegitimate children occurred :

| Age. | Sex. | Cause of death. |
|-----------|--------|---|
| 19 days | M..... | Atelectasis. |
| 22 „ | M..... | Premature Birth and Convulsions. |
| 5 „ | M..... | Convulsions from Malformation of the Heart. |
| 10 months | M..... | Rickets. |
| 6 days | F..... | Premature Birth, Debility. |
| 5 years | M..... | Pulmonary Tuberculosis. |

The death-rates per 1,000 births of each class among legitimate and illegitimate children are shewn below.

| | 1898 | 1899 | 1900 | 1901 | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 |
|---|------|------|------|------|------|------|------|------|------|------|------|
| Infantile death-rate of legitimate children ... | 166 | 162 | 138 | 180 | 130 | 147 | 159 | 131 | 118 | 108 | 101 |
| Infantile death-rate of illegitimate children ... | 255 | 228 | 125 | 200 | 156 | 166 | 162 | 256 | 221 | 112 | 166 |

Vaccination.

I am obliged to the Registrar of the Sub-District of Crewe (Mr. T. W. Lovatt) for his kindness in supplying the following information.

| YEAR. | 1899 | 1900 | 1901 | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 |
|--|------|------|------|------|------|------|------|------|------|------|
| Births registered ... | 1400 | 1420 | 1311 | 1412 | 1454 | 1425 | 1318 | 1260 | 1251 | 1174 |
| Successfully vaccinated ... | 945 | 990 | 900 | 1016 | 1060 | 1050 | 1014 | 922 | 860 | 706 |
| Certificates of insusceptibility ... | 3 | 5 | 6 | 3 | 2 | 5 | 3 | 3 | 2 | 7 |
| Certificates of exemption (Conscience Clause) ... | 66 | 40 | 33 | 22 | 33 | 21 | 44 | 60 | 113 | 237 |
| Had small-pox ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Died unvaccinated ... | 155 | 133 | 143 | 128 | 140 | 133 | 101 | 100 | 114 | 74 |
| Postponed by medical certificate ... | 61 | 43 | 24 | 33 | 43 | 35 | 30 | 53 | 28 | 30 |
| Removal to other districts | 44 | 59 | 49 | 51 | 56 | 50 | 49 | 55 | 75 | 76 |
| In abeyance ... | 126 | 150 | 156 | 159 | 120 | 142 | 77 | 69 | 59 | 63 |
| Percentage successfully vaccinated ... | 67 | 69 | 68 | 71 | 72 | 73 | 77 | 73 | 68 | 59 |
| Percentage successfully vaccinated excluding those who died unvaccinated ... | 75 | 76 | 77 | 79 | 75 | 80 | 83 | 80 | 75 | 64 |

Part ii.

Records of Disease.



Zymotic Diseases.

The principal diseases belonging to this group are small-pox, diphtheria, scarlet fever, enteric fever, typhus fever, measles, whooping-cough, and epidemic diarrhœa.

The mortality from the seven principal diseases in this group, known as the Zymotic death-rate, shews a slight increase upon last year, but is considerably below the average of the last ten years.

The number of deaths from the principal zymotic diseases during 1908 was as follows:—

| | | | Under 5 years. | Over 5 years. | Total. | Rate per 1,000. |
|------------------------------------|-----|-----|-------------------|------------------|--------|--------------------|
| Smallpox | ... | ... | ... | ... | ... | ... |
| Diphtheria and Membranous Croup | ... | ... | 6 | 2 | 8 | 0·165 |
| Scarlet Fever | ... | ... | 5 | 1 | 6 | 0·124 |
| Enteric Fever | ... | ... | 1 | ... | 1 | 0·020 |
| Measles | ... | ... | 7 | ... | 7 | 0·144 |
| Whooping Cough | ... | ... | 3 | 1 | 4 | 0·082 |
| Diarrhœa | ... | ... | 17 | 1 | 18 | 0·372 |
| Totals | ... | ... | 39 | 5 | 44 | 0·90 |

The mortality from these diseases was in England and Wales 1·29; in the 76 large towns 1·59, and in the 142 smaller towns 1·26, and in rural England and Wales 0·99.

The Zymotic Death-rates for several years are shewn in the following table:—

| | 1898 | 1899 | 1900 | 1901 | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 |
|-----------------------------------|------|------|------|------|------|------|------|------|-------|-------|-------|
| Small-pox ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Diphtheria and Membranous Croup } | 0·07 | 0·34 | 0·09 | 0·37 | 0·64 | 0·39 | 0·06 | 0·08 | 0·084 | 0·125 | 0·165 |
| Scarlet Fever ... | 0·07 | 0·02 | 0·19 | 0·14 | 0·06 | 0·19 | 0·23 | 0·08 | 0·106 | 0·125 | 0·124 |
| Enteric Fever ... | 0·17 | 0·09 | 0·24 | 0·07 | 0·04 | 0·08 | 0·02 | 0·08 | 0·0 | 0·062 | 0·020 |
| Measles ... | 0·88 | 0·24 | 0·41 | 0·07 | 0·41 | 0·0 | 0·28 | 0·47 | 0·318 | 0·041 | 0·144 |
| Whooping Cough ... | 0·22 | 0·64 | 0·12 | 0·14 | 0·20 | 0·37 | 0·26 | 0·06 | 0·148 | 0·250 | 0·082 |
| Diarrhœa ... | 1·21 | 0·98 | 0·82 | 1·46 | 0·67 | 0·24 | 0·76 | 0·34 | 0·504 | 0·187 | 0·372 |
| | 2·62 | 2·31 | 1·87 | 2·55 | 2·02 | 1·27 | 1·61 | 1·11 | 1·16 | 0·79 | 0·90 |

The following gives the number of deaths from these diseases occurring in each of the Wards:—

| | Central. | West. | North. | South. |
|-----------------------------------|----------|-------|--------|--------|
| Smallpox ... | ... | ... | ... | ... |
| Diphtheria & Membranous Croup ... | 1 | 2 | 4 | 1 |
| Scarlet Fever ... | 1 | ... | 3 | 2 |
| Enteric Fever ... | ... | ... | ... | 1 |
| Measles ... | 2 | 1 | 2 | 2 |
| Whooping Cough ... | 1 | 2 | ... | 1 |
| *Diarrhœa ... | 4 | 6 | 1 | 5 |
| Totals ... | 9 | 11 | 10 | 12 |

* 2 in Nantwich Workhouse.

The diseases which are compulsorily notifiable under the Infectious Diseases (Notification) Act, 1889, are Small-pox, Cholera, Diphtheria, Membranous Croup, Erysipelas, Scarlatina or Scarlet Fever, and the fevers known as Typhus, Typhoid, Enteric, relapsing, continued, and puerperal. Notification has been in force in the Borough since October, 1896, when the Act of 1889 was "adopted." In 1900 Bubonic Plague was added to the list by order of the Local Government Board.

The number of notifications received each year from Medical Practitioners is shewn below:—

| 1897 | 1898 | 1899 | 1900 | 1901 | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 |
|------|------|------|------|------|------|------|------|------|------|------|------|
| 421 | 183 | 198 | 320 | 329 | 295 | 424 | 459 | 245 | 181 | 507 | 363 |

The number of notifications received each month during the year was as follows:—

| Jan. | Feb. | Mar. | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. |
|------|------|------|-------|-----|------|------|------|-------|------|------|------|
| 104 | 57 | 33 | 25 | 33 | 20 | 21 | 22 | 12 | 14 | 15 | 7 |

The ages of those who suffered from these diseases were:— Under 5 years of age, 91 cases, or 25.0 per cent.; 5 years old and under 15, 220 cases, or 60.6 per cent.; 15 years old and over, 52 cases, or 14.3 per cent. The number of cases notified in each ward was: In the Central Ward 68 cases, or 18.7 per cent.; in the West Ward 75 cases, or 20.6 per cent.; in the North Ward 111 cases, or 30.5 per cent.; and in the South Ward 109 cases, or 30.0 per cent.

The amount paid to Medical Practitioners for notifications, and the cost of notification per 1,000 of the population, has been as under:—

| | Cost per 1,000 of the population. | | | | | | | | | | |
|---------------------|-----------------------------------|-----|-----|-----|-----|----|---|----|----|----|--|
| 1896 (three months) | ... | ... | ... | ... | £19 | 5 | 0 | | | | |
| 1897 | ... | ... | ... | ... | £52 | 15 | 0 | £1 | 7 | 4 | |
| 1898 | ... | ... | ... | ... | £22 | 17 | 6 | £0 | 11 | 7 | |
| 1899 | ... | ... | ... | ... | £24 | 12 | 4 | £0 | 12 | 1 | |
| 1900 | ... | ... | ... | ... | £38 | 7 | 8 | £0 | 18 | 9 | |
| 1901 | ... | ... | ... | ... | £41 | 0 | 7 | £0 | 19 | 4 | |
| 1902 | ... | ... | ... | ... | £36 | 6 | 0 | £0 | 16 | 9 | |
| 1903 | ... | ... | ... | ... | £52 | 0 | 7 | £1 | 2 | 10 | |
| 1904 | ... | ... | ... | ... | £53 | 11 | 0 | £1 | 3 | 2 | |
| 1905 | ... | ... | ... | ... | £31 | 7 | 6 | £0 | 13 | 5 | |
| 1906 | ... | ... | ... | ... | £22 | 2 | 3 | £0 | 9 | 4 | |
| 1907 | ... | ... | ... | ... | £52 | 17 | 7 | £1 | 1 | 9 | |
| 1908 | ... | ... | ... | ... | £43 | 14 | 8 | £0 | 18 | 1 | |

Disinfection.

During the year 350 houses were disinfected, the number of houses disinfected after the occurrence of notifiable infectious diseases being 312; after deaths from Measles, 6; after deaths from Phthisis, 22; after deaths from Whooping Cough, 2; Influenza, 6; Diarrhœa, 2. In addition to the above twelve schools were disinfected during the year.

The bedding and clothing from these houses, as well as fifty-five sets of bedding from the Cottage Hospital, were removed to the Isolation Hospital, and disinfected by passing through the Washington Lyon Disinfecter.

The following quantities of disinfectants were used during the year:—

| | | | | | | |
|------------------|-----|-----|-----|-----|-----|---------------------------|
| Kerol | ... | ... | ... | ... | ... | 20 gallons. |
| Carbolic Powder | ... | ... | ... | ... | ... | 2 tons. |
| Izal Powder | ... | ... | ... | ... | ... | $\frac{1}{2}$ ton. |
| Formalin Tablets | ... | ... | ... | ... | ... | 60 lbs. |
| Formalin | ... | ... | ... | ... | ... | 10 $\frac{1}{4}$ gallons. |

The number of persons supplied with disinfectants on application at the Sanitary Office was 1,024.

Bacteriological Examinations.

The number of specimens received from Medical Practitioners in the Borough for examination during the year was 52, of which 18 proved positive and 34 negative.

| Specimen. | | Number received. | Result. | |
|---------------------|-----|------------------|-----------|-----------|
| | | | Positive. | Negative. |
| Typhoid Fever—Blood | ... | 5 | 1 | 4 |
| Diphtheria—Swab | ... | 10 | 1 | 9 |
| Phthisis—Sputum | ... | 37 | 16 | 21 |
| Others | ... | ... | ... | ... |
| Totals | ... | 52 | 18 | 34 |

Small-pox.

There were no cases notified during the year. The last occasion upon which this disease appeared in the Borough was in 1903.

The number of deaths from Small-pox which have occurred in the Borough during each year since 1874 is as follows:—

| | | | | | |
|-----------|-----|----------|-----------|-----|-----------|
| 1874 | ... | 4 deaths | 1882 | ... | 0 deaths. |
| 1875 | ... | 1 „ | 1883 | ... | 1 „ |
| 1876-1879 | | 0 „ | 1884 | ... | 1 „ |
| *1880 | | | 1885-1908 | | 0 „ |
| 1881 | ... | 0 „ | | | |

* No record.

Cerebro-Spinal Fever.

This disease was notifiable in the Borough for the twelve months ending May 18th, 1908.

No cases have been reported during the year.

Diphtheria.

| | | | | | | | |
|---------------------------|-----|-----|-----|-----|-----|-----|------|
| Cases notified | ... | ... | ... | ... | ... | ... | 39 |
| Deaths | ... | ... | ... | ... | ... | ... | 8 |
| Fatality per cent. | ... | ... | ... | ... | ... | ... | 20.5 |
| Cases removed to Hospital | ... | ... | ... | ... | ... | ... | 18 |

Cases and deaths in previous years since 1897:—

| | | 1897 | 1898 | 1899 | 1900 | 1901 | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 |
|------------|-----|------|------|------|------|------|------|------|------|------|------|------|
| Cases | ... | 66 | 40 | 46 | 36 | 112 | 136 | 150 | 53 | 47 | 32 | 37 |
| Deaths | ... | 11 | 3 | 14 | 4 | 16 | 28 | 18 | 3 | 4 | 4 | 6 |
| Fatality % | ... | 16.6 | 7.5 | 30.4 | 11.1 | 14.2 | 20.5 | 12.0 | 5.6 | 8.5 | 12.5 | 16.2 |

The number of cases notified was 2 more than in 1907, and is 50 under the average yearly number reported since notification began. The number of deaths was 8, two more than in 1907, and the fatality is consequently higher. The average annual number of deaths since 1874 has been 7.

At no time during the year did the disease show any tendency to become epidemic, the largest number notified during any month being eight. The number of cases notified each month was:—

| Jan. | Feb. | March | April | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
|------|------|-------|-------|-----|------|------|------|------|------|------|------|
| 2 | 3 | 8 | 3 | 3 | 0 | 2 | 4 | 4 | 6 | 3 | 1 |

From the South Ward 15 cases were notified, 4 from the Central Ward, 12 from the North Ward, and 8 from the West Ward.

The disease showed little tendency to spread. In one instance during October three members of one family were affected. The first case was notified on the 13th, the second on the 14th, and the third on the 24th.

About the same time three members of another family living in the same street were affected, the first case being notified on Oct. 23rd, the second on the 27th, and the third on Nov. 17th. One of these cases was of a very severe type, and the patient died.

These were the only two instances where more than one case occurred in the same house.

Eighteen cases were removed to Hospital, of whom one died; twenty-one were treated at home, of whom seven died.

In addition to the usual measures for dealing with Diphtheria, hospital isolation, disinfection, bacteriological diagnosis, etc., since 1900, the Health Committee have provided Antitoxin, first at cost price and since 1901 free of cost to all unable to afford it. During the year 60 vials, each containing 2,000 units, were used in this way.

The number of deaths from Diphtheria each year since 1874 is given below:—

| | | |
|------------------|------------------|------------------|
| 1874... 0 deaths | 1885... 4 deaths | 1896...10 deaths |
| 1875... 7 „ | 1886... 5 „ | 1897...11 „ |
| 1876... 7 „ | 1877...16 „ | 1898... 3 „ |
| 1877... 2 „ | 1888...14 „ | 1899...14 „ |
| *1878... | 1889... 8 „ | 1900... 4 „ |
| 1879... 2 „ | 1890... 4 „ | 1901...16 „ |
| *1880... | 1891... 3 „ | 1902...28 „ |
| 1881... 1 „ | 1892... 9 „ | 1903...18 „ |
| 1882... 4 „ | 1893...19 „ | 1904... 3 „ |
| 1883... 6 „ | 1894... 2 „ | 1905... 4 „ |
| 1884... 4 „ | 1895... 2 „ | 1906... 4 „ |
| | | 1907... 6 „ |

1908 ... 8 deaths.

* No record.

Scarlet Fever.

| | | | | | | | | | | | |
|---------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cases notified | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 296 |
| Deaths | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 6 |
| Fatality per cent. | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2.2 |
| Cases removed to Hospital | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 259 |

Cases and deaths in previous years since 1897 :

| | | | | | | | | | | | |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| Year. | 1897 | 1898 | 1899 | 1900 | 1901 | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 |
| Cases ... | 201 | 57 | 50 | 211 | 160 | 96 | 212 | 351 | 147 | 120 | 442 |
| Deaths ... | 7 | 3 | 1 | 8 | 6 | 3 | 9 | 11 | 4 | 5 | 6 |
| Fatality per cent. | 3.4 | 5.2 | 2.0 | 3.7 | 3.7 | 3.1 | 4.2 | 3.1 | 3.7 | 4.1 | 1.3 |

The number of cases notified is above the yearly average, but not so great as in 1907. The greatest number notified in any one month was 95 in January. This is the largest number of notifications received in any month of which any record can be found. The epidemic commenced in September, 1907, and reached its height in January of this year, after which the number of notifications rapidly diminished, reaching the average about March. From September to December the number of cases notified was much below the average for these months.

Monthly Notifications of Scarlet Fever, 1898-1908.

| | | 1898 | 1899 | 1900 | 1901 | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | Monthly Average 1898 to 1907 | 1908 |
|-----------|-----|------|------|------|------|------|------|------|------|------|------|---------------------------------------|------|
| January | ... | 16 | 5 | 5 | 25 | 13 | 29 | 16 | 24 | 7 | 11 | 15 | 95 |
| February | ... | 10 | 1 | — | 13 | 14 | 20 | 14 | 26 | 8 | 20 | 12 | 53 |
| March | ... | 6 | 2 | 1 | 12 | 3 | 12 | 24 | 16 | 12 | 15 | 10 | 21 |
| April | ... | 2 | — | 7 | 11 | 2 | 4 | 30 | 11 | 7 | 17 | 9 | 22 |
| May | ... | — | 2 | 4 | 14 | 3 | 11 | 42 | 16 | 14 | 28 | 13 | 24 |
| June | ... | 6 | 2 | 3 | 7 | 12 | 15 | 23 | 16 | 9 | 21 | 11 | 20 |
| July | ... | 1 | 2 | 19 | 4 | 1 | 8 | 19 | 7 | 1 | 21 | 8 | 18 |
| August | ... | 2 | 5 | 17 | 6 | 5 | 19 | 42 | 4 | 6 | 16 | 12 | 15 |
| September | ... | 2 | 1 | 21 | 13 | 9 | 21 | 37 | 10 | 6 | 38 | 15 | 7 |
| October | ... | 3 | 6 | 54 | 13 | 12 | 22 | 46 | 5 | 16 | 93 | 27 | 7 |
| November | ... | 5 | 17 | 34 | 19 | 11 | 31 | 19 | 9 | 23 | 88 | 25 | 10 |
| December | ... | 4 | 7 | 46 | 23 | 11 | 20 | 39 | 3 | 11 | 74 | 23 | 4 |

In the Central Ward 60 cases were notified; in the West Ward 59; in the North Ward 97; and in the South Ward 80 cases.

The fatality of the disease, 2.2 per cent., was very low—only twice during the previous ten years has it been lower, viz.: 1.3 per cent. in 1907 and 2.0 in 1899. In the fatal cases the periods elapsing between removal to hospital and death were—1 day, 5 days, 8 days, 22 days, 23 days and 23 days. Two occurred in January, two in February, one in August and one in November. The ages of the fatal cases varied from 1 to 7 years. With one exception they were all males.

Of the total number 157 were males and 139 females. The ages of those attacked were:—

| | | | | | | | |
|---------------|-----|-----|-----|-----|-----|-----|-----------|
| Under 5 years | ... | ... | ... | ... | ... | ... | 75 cases. |
| 5—10 | „ | ... | ... | ... | ... | ... | 136 „ |
| 10—15 | „ | ... | ... | ... | ... | ... | 60 „ |
| 15—20 | „ | ... | ... | ... | ... | ... | 13 „ |
| 20 and over | ... | ... | ... | ... | ... | ... | 12 „ |

The number of families affected was 214, and in 56 of these two or more cases occurred.

158 families had 1 case each.

| | | | | |
|----|---|---|---------|---|
| 38 | „ | „ | 2 cases | „ |
| 12 | „ | „ | 3 „ | „ |
| 5 | „ | „ | 4 „ | „ |
| 0 | „ | „ | 5 „ | „ |
| 1 | „ | „ | 6 „ | |

The number of cases occurring in each Ward, and from month to month during the year, is shewn below :—

| | | Central. | West. | North. | South. | Totals. |
|-----------|-----|----------|-------|--------|--------|---------|
| January | ... | 19 | 14 | 27 | 35 | 95 |
| February | ... | 7 | 20 | 19 | 7 | 53 |
| March | ... | 5 | 5 | 7 | 4 | 21 |
| April | ... | 8 | 3 | 5 | 6 | 22 |
| May | ... | 5 | 6 | 7 | 6 | 24 |
| June | ... | 7 | 2 | 9 | 2 | 20 |
| July | ... | 3 | 1 | 6 | 8 | 18 |
| August | ... | 1 | ... | 8 | 6 | 15 |
| September | ... | 2 | 1 | 4 | ... | 7 |
| October | ... | 1 | 3 | 2 | 1 | 7 |
| November | ... | 1 | 4 | 2 | 3 | 10 |
| December | ... | 1 | ... | 1 | 2 | 4 |
| | | 60 | 59 | 97 | 80 | 296 |

The following is a list of cases dismissed from hospital during 1908, which on returning home were followed by one or more subsequent cases in the same house.

| Name. | Age. | Date of Admission. | | Date of Discharge. | | Next Case. | |
|--------|------|--------------------|------|--------------------|------|------------|------|
| A.H. | 9 | November | 7th | December | 10th | January | 1st |
| W.W. | 5 | " | 16th | " | 20th | " | 1st |
| J.A.B. | 5 | " | 23rd | " | 28th | " | 1st |
| A.W. | 10 | October | 15th | November | 22nd | " | 9th |
| A.B. | 11 | November | 21st | December | 28th | " | 13th |
| C.C. | 5 | " | 21st | " | 31st | " | 31st |
| W.P. | 3 | December | 16th | January | 20th | February | 3rd |
| T.M. | 5 | " | 19th | " | 29th | " | 6th |
| G.H. | 7½ | " | 20th | " | 24th | " | 13th |
| H.G. | 2 | November | 20th | December | 24th | March | 10th |
| E.M. | 5 | " | 26th | January | 3rd | " | 17th |
| M.P. | 12 | January | 18th | February | 28th | " | 19th |
| G.M. | 7 | February | 8th | March | 17th | " | 27th |
| W.D. | 7 | January | 27th | " | 11th | April | 13th |
| C.C. | 2 | " | 17th | April | 1st | " | 27th |
| J.L. | 8 | March | 16th | " | 28th | May | 25th |
| T.G. | 12 | May | 4th | June | 11th | July | 27th |
| H.P. | 11 | July | 9th | August | 18th | Septemb'r | 28th |
| G.W. | 6 | August | 11th | October | 13th | November | 17th |
| W.E. | 5 | September | 21st | November | 13th | " | 25th |

It will be seen that the interval between the return of the discharged patient to his home and the admission of the next case into hospital varies from one or two days to as much as six weeks.

Every effort is made to ensure efficient disinfection before dismissal from the hospital. The skin and hair of each patient receive most careful treatment, ears, nose and mouth are douched with an antiseptic lotion, and a disinfectant bath is given before dismissal.

Before dismissal of each case the parents receive a printed warning to the effect that, while every precaution has been taken, freedom from infection cannot be guaranteed. Instructions are also

given to keep the discharged case apart from other children for a fortnight at least, or at least not to sleep in the same bed as other children, and for kissing to be prohibited.

Probably the most common cause of "return" cases of Scarlet Fever is the nasal discharge which frequently develops some time after the child's return home from hospital. A few cases may also be due to the bringing out of toys or clothes which were put away and not allowed to be disinfected on the child's removal to hospital.

The number of deaths from Scarlet Fever in each year since 1874 is as follows:—

| | | |
|------------------|------------------|-------------------|
| 1874... 9 deaths | 1884... 0 deaths | 1894... 8 deaths. |
| 1875...43 „ | 1885...13 „ | 1895...22 „ |
| 1876... 4 „ | 1886... 9 „ | 1896...18 „ |
| 1877...22 „ | 1887... 7 „ | 1897... 7 „ |
| 1878...many „ | 1888... 8 „ | 1898... 3 „ |
| 1879...77 „ | 1889...16 „ | 1899... 1 „ |
| *1880... | 1890... 0 „ | 1900... 8 „ |
| 1881...28 „ | 1891... 2 „ | 1901... 6 „ |
| 1882... 7 „ | 1892... 3 „ | 1902... 3 „ |
| 1883... 7 „ | 1893...19 „ | 1903... 9 „ |
| 1904 | 11 deaths. | |
| 1905 | 4 „ | |
| 1906 | 5 „ | |
| 1907 | 6 „ | |
| 1908 | 6 „ | |

* No record.

Enteric Fever.

| | |
|-------------------------|---|
| Cases notified | 4 |
| Number of deaths | 1 |

Cases and deaths in previous years since 1897:—

| Year. | 1897 | 1898 | 1899 | 1900 | 1901 | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| Cases | 28 | 32 | 30 | 22 | 15 | 17 | 11 | 2 | 10 | 3 | 5 |
| Deaths | 3 | 7 | 4 | 10 | 3 | 2 | 4 | 1 | 4 | 0 | 3 |
| Fatality per cent. | 10·7 | 21·8 | 13·3 | 45·4 | 20·0 | 11·7 | 36·4 | 50 | 40 | 0 | 60 |

Of the four cases of Enteric Fever three occurred in one family. The first was notified in January, the second two-and-a-half weeks afterwards, and the third a month later still. The source of infection could not be traced. The first of these cases was in a child of 5 years and proved fatal. The remaining case occurred at the end of September. This patient, a girl of 22, had visited a sea-side town about three weeks before becoming ill.

The number of deaths from Enteric Fever in each year since 1874 is as follows:—

| | | |
|------------------|------------------|-------------------|
| 1874... 4 deaths | 1884...13 deaths | 1894... 5 deaths. |
| 1875...15 „ | 1885... 4 „ | 1895... 6 „ |
| 1876... 8 „ | 1886... 7 „ | 1896... 9 „ |
| 1877...12 „ | 1887...11 „ | 1897... 4 „ |
| *1878... | 1888... 6 „ | 1898... 7 „ |
| 1879... 6 „ | 1889... 0 „ | †1899... 4 „ |
| *1880... | 1890...11 „ | 1900...10 „ |
| 1881... 9 „ | 1891... 4 „ | 1901... 3 „ |
| 1882...10 „ | 1892... 3 „ | 1902... 2 „ |
| 1883... 4 „ | 1893... 9 „ | 1903... 4 „ |
| 1904 | ... | 1 death. |
| 1905 | ... | 4 deaths. |
| 1906 | ... | 0 „ |
| 1907 | ... | 3 „ |
| 1908 | ... | 1 „ |

* No record. † Death also occurred in a non-resident.

The average annual number of deaths from Enteric Fever for 32 years since 1874 is six.

Diarrhœa.

| | | |
|----------------------|--------|------|
| Number of deaths | ... .. | 27 |
| Death-rate per 1,000 | ... .. | 0.55 |

The diseases grouped under this heading include all the forms of diarrhœa, known variously as epidemic and zymotic enteritis; epidemic and summer diarrhœa; dysentry and dysenteric diarrhœa, cholera (not Asiatic) and cholera nostras; and in addition as regards deaths under one year of age, enteritis (non-tuberculous); muco-enteritis, gastro-enteritis, and gastritis and gastro-intestinal catarrh.

The designation recommended by the Royal College of Physicians in the fourth edition of "The Nomenclature of Disease," for the specific infectious disease commonly known as epidemic diarrhœa, is Infective Enteritis. It is to be hoped that this name will now be used generally by medical men, as the many names used in the past have led to much confusion and difficulty in classifying the disease.

The number of deaths registered from these causes was 27, as compared with 16 in 1907. The average number of deaths each year since 1874 is 26.

Diarrhœa only becomes epidemic in long periods of warm weather accompanied by deficient rainfall. The disease does not usually become common until the temperature 4 feet below the surface of the ground reaches 56° F. This usually happens about August or September—the third quarter of the year. Cold and wet seasons do not favour its development. There is an enormous difference between the percentages of cases in breast-fed and artificially-fed infants. This is probably explained by the readiness with which putrefactive changes occur in milk during the summer months.

Unfortunately, many mothers still use feeding-bottles with long india-rubber tubes. It is impossible to keep the latter clean, and, consequently, they become very foul inside after a little use. If for any reason a child must be artificially fed, it is advisable to use one of the boat-shaped bottles without a tube.

Of the 27 deaths which occurred in the Borough during 1908 all but one or two occurred in artificially-fed infants.

The seasonal incidence is shewn in the following table:—

| | | | 1898 | 1899 | 1900 | 1901 | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 |
|-------------|-----|-----|------|------|------|------|------|------|------|------|------|------|------|
| January | ... | ... | ... | ... | 1 | ... | 2 | 1 | 3 | ... | ... | ... | 1 |
| February | ... | ... | ... | 1 | 1 | 1 | 1 | 1 | ... | ... | ... | 3 | 3 |
| March | ... | ... | ... | ... | ... | ... | 1 | 2 | ... | ... | 1 | 2 | 2 |
| 1st Quarter | ... | ... | ... | 1 | 2 | 1 | 4 | 4 | 3 | ... | 1 | 5 | 6 |
| April | ... | ... | ... | 1 | ... | ... | 3 | ... | 2 | 1 | 1 | ... | 1 |
| May | ... | ... | ... | 1 | 1 | 1 | ... | ... | 2 | 3 | ... | 1 | ... |
| June | ... | ... | ... | 1 | 3 | 1 | 3 | 3 | 1 | 1 | 1 | ... | 2 |
| 2nd Quarter | ... | ... | 1 | 5 | 2 | 4 | 5 | 3 | 5 | 5 | 2 | 1 | 3 |
| July | ... | ... | ... | 5 | 4 | 7 | 8 | 2 | 3 | 2 | 3 | ... | ... |
| August | ... | ... | 15 | 26 | 9 | 26 | 2 | 7 | 18 | 4 | 6 | 2 | 5 |
| September | ... | ... | 17 | 17 | 12 | 10 | 6 | 11 | 10 | 6 | 22 | 5 | 8 |
| 3rd Quarter | ... | ... | 37 | 47 | 28 | 44 | 10 | 21 | 30 | 13 | 28 | 7 | 13 |
| October | ... | ... | 9 | 1 | 4 | 8 | 4 | 2 | 4 | 5 | 2 | 2 | 2 |
| November | ... | ... | 3 | 2 | 2 | ... | 2 | 2 | ... | ... | 1 | ... | 1 |
| December | ... | ... | 1 | 1 | ... | 5 | 4 | 1 | 1 | ... | 1 | 1 | 2 |
| 4th Quarter | ... | ... | 13 | 4 | 6 | 13 | 10 | 5 | 5 | 5 | 4 | 3 | 5 |

The number of deaths in each Ward was:—6 in the Central, 13 in the West, 1 in the North, and 5 in the South. Two occurred in Nantwich Workhouse.

The ages at death are shewn below, and it will be seen that the disease is one which is specially fatal to infants and young children:—

| | 1899 | 1900 | 1901 | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 |
|---|------|------|------|------|------|------|------|------|------|------|
| Under 3 months ... | 14 | 9 | 9 | 7 | 10 | 9 | 4 | 8 | 4 | 8 |
| 3 and under 6 months ... | 22 | 8 | 22 | 5 | 15 | 11 | 6 | 15 | 5 | 9 |
| 6 and under 12 months ... | 15 | 11 | 17 | 10 | 7 | 19 | 9 | 7 | 5 | 6 |
| 1 year and under 2 years ... | 3 | 5 | 7 | 4 | 1 | 3 | 2 | 1 | 1 | 2 |
| 2 „ 3 „ ... | ... | 1 | ... | 1 | ... | ... | 1 | 2 | ... | ... |
| 3 „ 4 „ ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 |
| 4 „ 5 „ ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... |
| 5 years and over ... | 3 | 3 | 6 | 2 | ... | 1 | 1 | 2 | 1 | 1 |

The number of deaths occurring from Diarrhœa each year since 1874 is as follows:—

| | | |
|--------------------|--------------------|---------------------|
| 1874 ... 21 deaths | 1886 ... 39 deaths | †1897 ... 61 deaths |
| 1875 ... 19 „ | 1887 ... 14 „ | 1898 ... 47 „ |
| 1876 ... 21 „ | 1888 ... 7 „ | ‡1899 ... 41 „ |
| 1877 ... 5 „ | 1889 ... 14 „ | †1900 ... 35 „ |
| 1878 ... 41 „ | 1890 ... 15 „ | 1901 ... 62 „ |
| 1879 ... 2 „ | 1891 ... 11 „ | 1902 ... 29 „ |
| *1880 ... | 1892 ... 24 „ | 1903 ... 11 „ |
| 1881 ... 0 „ | 1893 ... 93 „ | 1904 ... 34 „ |
| 1882 ... 16 „ | 1894 ... 13 „ | 1905 ... 16 „ |
| 1883 ... 10 „ | 1895 ... 49 „ | 1906 ... 35 „ |
| 1884 ... 32 „ | 1896 ... 22 „ | 1907 ... 16 „ |
| 1885 ... 6 „ | 1908 ... | 27 deaths. |

* No record. † One case of Dysentery included in each year.

‡ One death of a non-resident included.

Measles.

| | | | | | | |
|----------------------|-----|-----|-----|-----|-----|------|
| Number of deaths | ... | ... | ... | ... | ... | 7 |
| Death-rate per 1,000 | ... | ... | ... | ... | ... | 0.14 |

The number of deaths registered is five more than in the preceding year. The average annual number of deaths since 1874 is eleven.

Measles has been epidemic in the town during the year. A number of cases occurred in June, necessitating the closure of the Infants' Department of West Street Council School. The number of cases then diminished until about the end of August, when they rapidly increased until, in November, the Infants' Departments of five Schools were closed at one time. The closure of these Schools had the desired effect, as on re-assembly the attendance quickly regained the average. The disease was of a somewhat mild type.

There were 683 certificates granted for the exclusion of children from school on account of Measles, as compared with 25 in 1907.

The number of deaths from Measles in the Borough each year since 1874 is as follows:—

| | | |
|--------------------|-------------------|--------------------|
| 1874 ... 21 deaths | 1886 ... 0 deaths | †1897 ... 1 death |
| 1875 ... 11 „ | 1887 ... 32 „ | 1898 ... 35 deaths |
| 1876 ... 2 „ | 1888 ... 7 „ | 1899 ... 10 „ |
| 1877 ... 0 „ | 1889 ... 8 „ | 1900 ... 17 „ |
| †1878 ... 30 „ | 1890 ... 14 „ | †1901 ... 3 „ |
| 1879 ... 1 „ | 1891 ... 1 „ | 1902 ... 18 „ |
| *1880 ... „ | 1892 ... 5 „ | 1903 ... 0 „ |
| 1881 ... 9 „ | 1893 ... 34 „ | 1904 ... 13 „ |
| 1882 ... 1 „ | 1894 ... 0 „ | 1905 ... 22 „ |
| 1883 ... 18 „ | 1895 ... 7 „ | 1906 ... 15 „ |
| 1884 ... 1 death | 1896 ... 9 „ | 1907 ... 2 „ |
| 1885 ... 31 deaths | | |
| 1908 ... | 7 deaths. | |

* No record. † The second half of the year only.

‡ One also occurred in a non-resident.

Whooping Cough.

| | | | | | | |
|----------------------|-----|-----|-----|-----|-----|------|
| Number of deaths | ... | ... | ... | ... | ... | 4 |
| Death-rate per 1,000 | ... | ... | ... | ... | ... | 0.08 |

The number of deaths registered is 8 less than in the preceding year—4 as against 12 in 1907. The average annual number of deaths since 1874 is eleven. The number of certificates granted for the exclusion of children from school on account of Whooping Cough was 4, as compared with 93 in 1907.

The number of deaths from Whooping Cough each year since 1874 is as follows:—

| | | |
|-------------------|--------------------|--------------------|
| 1874 ... 1 death | 1886 ... 8 deaths | 1897 ... 26 deaths |
| 1875 ... 9 deaths | 1887 ... 4 „ | 1898 ... 9 „ |
| 1876 ... 2 „ | 1888 ... 4 „ | 1899 ... 26 „ |
| 1877 ... 9 „ | 1889 ... 17 „ | 1900 ... 5 „ |
| *1878 ... — „ | *1890 ... — „ | 1901 ... 19 „ |
| 1879 ... 9 „ | 1891 ... 13 „ | 1902 ... 9 „ |
| *1880 ... — „ | 1892 ... 23 „ | 1903 ... 17 „ |
| 1881 ... 4 „ | 1893 ... 14 „ | 1904 ... 12 „ |
| 1882 ... 9 „ | 1894 ... 19 „ | 1905 ... 28 „ |
| 1883 ... 4 „ | 1895 ... 7 „ | 1906 ... 7 „ |
| 1884 ... 14 „ | 1896 ... 8 „ | 1907 ... 12 „ |
| 1885 ... 11 „ | 1908 ... 4 deaths. | |

* No record.

Erysipelas.

| | | | | | | |
|--------------------|-----|-----|-----|-----|-----|------|
| Cases notified | ... | ... | ... | ... | ... | 19 |
| Number of deaths | ... | ... | ... | ... | ... | 2 |
| Fatality per cent. | ... | ... | ... | ... | ... | 10.5 |

Cases and Deaths in the previous years since 1897:—

| | | | | | | | | | | | |
|---------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Year... | 1897 | 1898 | 1899 | 1900 | 1901 | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 |
| Cases | 115 | 49 | 62 | 14 | 40 | 40 | 40 | 52 | 31 | 21 | 23 |
| Deaths | 9 | 3 | 2 | 0 | 3 | 4 | 7 | 5 | 1 | 2 | 1 |
| Fatality } per cent. } | 7 | 6 | 3 | 0 | 7.5 | 10 | 17 | 9.6 | 3.2 | 9.5 | 4.3 |

The parts affected were:—The face, 14 cases; other parts, 5 cases.

Puerperal Fever.

| | |
|-------------------------|---|
| Cases notified | 5 |
| Number of deaths | 0 |

Cases and Deaths in the previous years since 1897:—

| Year. | 1897 | 1898 | 1899 | 1900 | 1901 | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 |
|-----------------------|------|------|------|------|------|------|------|------|------|------|------|
| Cases ... | 7 | 4 | 10 | 7 | 1 | 4 | 6 | 1 | 10 | 5 | 0 |
| Deaths ... | 3 | 2 | 7 | 5 | 0 | 2 | 2 | 3 | 5 | 1 | 0 |
| Fatality per cent. \| | 42 | 50 | 70 | 71 | 0 | 50 | 33 | ? | 50 | 20 | 0 |

Five cases of this disease were notified during 1908, and all occurred in the practices of registered mid-wives. Two of them occurred, within three days of one another, in the practice of one mid-wife, pointing to the fact that infection was carried by her from one patient to the other.

All the cases but one were removed to the Isolation Hospital, and all recovered. The mid-wives concerned were suspended from practice for a short time, and in the meantime they visited the Hospital, where they were given a disinfectant bath and had their clothing and appliances disinfected.

Tuberculous Phthisis.

| | |
|-----------------------------|-----|
| Number of deaths | 22 |
| Death-rate per 1,000 | 0.4 |

The number of deaths is 5 less than the preceding year, and is eight less than the average yearly number of deaths since 1874.

Fifteen of the deaths were of males and 7 of females. One death from Phthisis occurred under ten years of age.

Ages at death from Phthisis:—

| | | | | | | | | |
|------------|---|----|-----|-----|-----|-----|-----|-------------|
| Years ... | 1 | —5 | —10 | —20 | —30 | —40 | —50 | —50 upwards |
| Deaths ... | 0 | 0 | 1 | 3 | 4 | 5 | 6 | 3 |

In the South and West Wards there were 6 each, in the Central Ward 3, and in the North Ward 4 deaths. Three deaths of Crewe residents occurred in the Workhouse.

The occupations were:—

| | | | | | |
|----------------|-----|---|---------------|-----|---|
| Labourer | ... | 1 | Postman | ... | 1 |
| Engine Driver | ... | 1 | School Master | ... | 1 |
| Plasterers | ... | 2 | Stonemason | ... | 1 |
| Fustian Cutter | ... | 1 | Clerk ... | ... | 1 |
| Coachman | ... | 1 | Boilermaker | ... | 1 |
| Machinist | ... | 1 | | | |

In the remainder the designation under this heading is that of Wife, Son or Daughter.

In 1906 the Health Committee applied to the Local Government Board to have Consumption made a compulsorily notifiable disease, but were unsuccessful. It was therefore decided to ask the medical men of the town to notify cases voluntarily, and to admit patients to the Isolation Hospital, when accommodation existed, for a month or so, and to educate them in the methods of prevention of the spread of the disease. A case was admitted towards the end of the year in a fairly advanced condition. He rapidly improved under the altered conditions under which he lived. He remained in the Hospital for eight weeks, and during that time gained 28 lbs. in weight. Apart from the actual treatment of the case the patient is taught the value of fresh air and the danger caused to others by indiscriminate spitting about. He is taught to spit only in a pocket flask. There is also the advantage that whilst the patient remains in hospital there is no danger of his infecting the other members of the family. The arrangement now shows signs of becoming more popular, as at the end of the year two more cases applied for admission.

The number of deaths from Phthisis occurring in the Borough each year since 1874 is as follows:—

| | | | |
|--------------------|--------------------|--------------------|---|
| 1874 ... 31 deaths | 1885 ... 33 deaths | 1896 ... 33 deaths | } |
| 1875 ... 30 .. | 1886 ... 34 .. | 1897 ... 29 .. | |
| 1876 ... 17 .. | 1887 ... 39 .. | 1898 ... 24 .. | } |
| 1877 ... 19 .. | 1888 ... 22 .. | 1899 ... 29 .. | |
| *1878 | 1889 ... 38 .. | 1900 ... 42 .. | } |
| 1879 ... 28 .. | 1890 ... 36 .. | 1901 ... 38 .. | |
| *1880 | 1891 ... 23 .. | 1902 ... 22 .. | } |
| 1881 ... 26 .. | 1892 ... 24 .. | 1903 ... 36 .. | |
| 1882 ... 28 .. | 1893 ... 31 .. | 1904 ... 29 .. | } |
| 1883 ... 45 .. | 1894 ... 34 .. | 1905 ... 24 .. | |
| 1884 ... 25 .. | 1895 ... 42 .. | 1906 ... 39 .. | } |
| | | 1907 ... 27 .. | |
| 1908 | 22 deaths. | | |

* No record.

Other Tubercular Diseases.

| | |
|-----------------------------|-----|
| Number of deaths | 20 |
| Death-rate per 1,000 | 0.4 |

The number of deaths registered from these diseases is 6 less than in 1907. The record for previous years is shewn below :—

| | 1897 | 1898 | 1899 | 1900 | 1901 | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 |
|---|------|------|------|------|------|------|------|------|------|------|------|------|
| Tubercular Meningitis | 7 | 13 | 6 | 9 | 23 | 7 | 10 | 12 | 12 | 9 | 5 | 3 |
| Tubercular Peritonitis and Tabes Mesenterica | 14 | 23 | 15 | 12 | 18 | 13 | 18 | 20 | 16 | 5 | 14 | 6 |
| Other forms | 2 | 5 | 6 | 18 | 7 | 14 | 7 | 13 | 16 | 13 | 7 | 11 |
| | 23 | 41 | 27 | 39 | 48 | 34 | 35 | 45 | 44 | 27 | 26 | 20 |

Females contributed 11 deaths and males 9—these were chiefly children, there being only seven deaths over 10 years of age.

Ages at death :

| | | | | |
|------------|-----|-------|-------|----------------|
| Years ... | 1—5 | 10—20 | 30—40 | 50—50 upwards. |
| Deaths ... | 3 | 6 | 4 | 3 — 2 2 |

Influenza.

| | |
|--|------|
| Number of deaths | 1 |
| Mortality per 1,000 of population | 0.02 |

The number of deaths registered from this cause was eight less than in 1907.

Cancer and other Malignant Diseases.

From this cause 31 deaths were registered. The number of deaths each year since 1897 is as follows :—

| | | | | | | | | | | | | |
|--------|------|------|------|------|------|------|------|------|------|------|------|------|
| Years | 1897 | 1898 | 1899 | 1900 | 1901 | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 |
| Deaths | 15 | 21 | 25 | 19 | 32 | 35 | 24 | 25 | 29 | 28 | 40 | 31 |

Death-rate per 1,000 during the last twelve years:

| | | | | | | | | | | | | |
|--------|------|------|------|------|------|------|------|------|------|------|------|------|
| Years | 1897 | 1898 | 1899 | 1900 | 1901 | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 |
| Deaths | 0.38 | 0.53 | 0.61 | 0.45 | 0.75 | 0.80 | 0.52 | 0.52 | 0.60 | 0.59 | 0.83 | 0.64 |

Ages at death:

| | | | | | | | |
|--------|-----|-------|-------|-------|-------|-------|------------|
| Years | ... | 15—25 | 25—35 | 35—45 | 45—55 | 55—65 | 65 upwards |
| Deaths | ... | — | — | — | 3 | 9 | 6 13 |

Twenty of the deaths were of females, and 11 of males. Twenty-eight were registered as Carcinoma and three as Sarcoma. The parts affected and deaths from each were:—Stomach, 10; Intestine, 4; Uterus, 4; Liver, 2; Neck and Breast, each 2; Larynx, 2; Bladder, 5.

Diseases of the Respiratory System.

The deaths recorded from the three most important members of this group of diseases are given in the following table.

| | | 1897 | 1898 | 1899 | 1900 | 1901 | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 |
|-------------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|
| Bronchitis ... | ... | 68 | 64 | 71 | 54 | 56 | 47 | 41 | 57 | 38 | 27 | 44 | 46 |
| Pneumonia... | } | 61 | 57 | 55 | 43 | 70 | 40 | 38 | 42 | 25 | 14 | 26 | 35 |
| Broncho-Pneumonia | | | | | | | 25 | 25 | 23 | 31 | 26 | 28 | 17 |
| Others ... | ... | 16 | 4 | 10 | 6 | 3 | 9 | 10 | 11 | 14 | 9 | 12 | 6 |
| Totals ... | ... | 145 | 125 | 136 | 103 | 129 | 121 | 114 | 136 | 108 | 76 | 110 | 101 |

The following table shews the age distribution of the deaths:—

| | | 0-1 | 1-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60 and upwards |
|-------------------|-----|-----|-----|------|-------|-------|-------|-------|-------|----------------|
| Bronchitis ... | ... | 16 | 3 | ... | ... | ... | ... | 1 | 3 | 23 |
| Pneumonia ... | ... | 4 | 3 | 1 | 1 | 2 | 3 | 8 | 3 | 10 |
| Broncho-Pneumonia | ... | 5 | 8 | 1 | 1 | ... | 1 | ... | 1 | ... |
| Others ... | ... | ... | 2 | ... | ... | ... | 1 | ... | 2 | 1 |
| Totals ... | ... | 25 | 16 | 2 | 2 | 2 | 5 | 9 | 9 | 34 |

Deaths from Violence.

Death was registered as due to violence in 20 cases, 15 of which resulted from accident and 5 from suicide. The average number registered yearly from this cause has, during the last ten years, been 17. The figures for former years are given below.

| | | | 1898 | 1899 | 1900 | 1901 | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 |
|----------|-----|-----|------|------|------|------|------|------|------|------|------|------|------|
| Accident | ... | ... | 4 | 16 | 27 | 13 | 19 | 14 | 16 | 9 | 9 | 16 | 15 |
| Suicide | ... | ... | ... | 1 | 1 | 6 | 2 | 4 | 5 | 3 | 4 | 5 | 5 |
| Homicide | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... |
| Totals | ... | ... | 4 | 17 | 29 | 19 | 21 | 18 | 21 | 12 | 13 | 21 | 20 |

Gains and Losses during 1908.

In the following tables of gains and losses, the death-rate per 1,000 from each cause is compared with the average death-rate of the preceding decennium. The death of one person in a population of 48,359 corresponds to a rate of 0.020 per 1,000. Hence the reduction or increase of the annual death-rate by this amount means the saving or loss of one life, and similarly a fall or rise in the rate of 0.100 means the saving or loss of five lives, and so on. The difference between the death-rate from all causes in 1908 and the decennium, 1898—1907 is 3.6 per 1,000. This represents the net gain and is equivalent to the saving of 180 lives.

GAINS.

| Name of Disease. | Average Rate during ten years 1898—1907 | Rate during 1908 | Gains per 1,000 | Probable number of lives saved during 1908 | Lives Lost or Gained during 1907 |
|--|---|------------------------|-----------------------|---|--|
| Diarrhœa | 0·71 | 0·37 | 0·34 | 17 | 32 gained |
| Respiratory Diseases | 2·60 | 2·15 | 0·45 | 22 | 23 gained |
| Erysipelas | 0·06 | 0·04 | 0·02 | 1 | 3 gained |
| Diphtheria... .. | 0·22 | 0·16 | 0·06 | 3 | 5 gained |
| Typhoid Fever | 0·08 | 0·02 | 0·06 | 3 | 1 gained |
| Whooping Cough | 0·27 | 0·08 | 0·19 | 9 | 2 gained |
| Old Age | 0·79 | 0·70 | 0·09 | 4 | ... |
| Influenza | 0·21 | 0·02 | 0·19 | 9 | 1 gained |
| Premature Birth | 0·57 | 0·37 | 0·20 | 10 | 1 gained |
| Nervous Diseases | 1·37 | 1·26 | 0·11 | 5 | 28 gained |
| Digestive Diseases | 1·05 | 0·78 | 0·27 | 13 | 15 gained |
| Tubercular Diseases (excluding Tabes Mesenterica) | 0·51 | 0·28 | 0·23 | 11 | 9 gained |
| Tabes Mesenterica | 0·30 | 0·12 | 0·18 | 9 | ... |
| Ill-Defined | 1·04 | 0·47 | 0·57 | 28 | 30 gained |
| Violence | 0·44 | 0·41 | 0·03 | 1 | 5 gained |
| Measles | 0·31 | 0·14 | 0·17 | 8 | 11 gained |
| Heart Diseases | 1·19 | 1·19 | ... | ... | 16 gained |
| Phthisis | 0·69 | 0·45 | 0·24 | 12 | 7 gained |
| Urinary Diseases | 0·25 | 0·22 | 0·03 | 1 | 16 lost |

LOSSES.

| Name of Disease. | Average Rate during ten years 1898—1907 | Rate during 1908 | Losses per 1,000 | Probable number of lives lost during 1908 | Lives Lost or Gained during 1907 |
|---------------------|---|------------------------|------------------------|--|--|
| Cancer | 0·61 | 0·64 | 0·03 | 1 | 13 lost |
| Scarlet Fever... .. | 0·11 | 0·12 | 0·01 | ... | ... |

Part iii.

General Sanitation.

Hospital Accommodation.

The accommodation provided for the isolation of Infectious Diseases (apart from Small-pox) consisted originally of two ward pavilions and an observation block, containing in all 28 beds. This has been in use since October 16th, 1897, and was erected at a cost of £9,500 (including the cost of the site). Owing to the rapid increase in the population, and the increasing number of patients treated, it was found necessary to enlarge the Hospital by the addition of a two ward pavilion for Diphtheria, together with extra housing accommodation for the nursing staff. The additions were commenced at the beginning of 1903, and were ready for occupation on the 30th March, 1904. The plans for the extension were prepared by George Bolshaw, Esq., of Southport, who was the architect for the original Hospital, and the work was carried out by Messrs. Garner and Son, of Crewe. The total cost of the pavilion and addition to the house was £3,066.

The Small-pox Hospital is situated upon the Corporation Farm, on the North side of Pym's Lane, off Minshull New Road. As it originally existed, excluding the part occupied by the caretaker and his family, there were two bedrooms available for patients, with suitable accommodation for a nurse. During 1903 further accommodation was provided by fitting up a small galvanised iron pavilion alongside the farm house. The Hospital has been unoccupied during the year, but has been kept ready for any emergency.

The full staff consists of the Matron, 8 nurses (2 charge, 4 assistant, and 2 probationer nurses), and 6 maids (cook, housemaid, scullery maid, 2 ward maids, and laundry maid). There is a non-resident ambulance attendant, who also acts as disinfecter for the Health Department, and a gardener. Occasional extra assistance has to be obtained in the laundry and grounds.

The following statement shews the number of cases dealt with during 1908:—

| | In Hospital December 31st, 1907 | Admitted | Discharged | Died | In Hospital, December 31st, 1908 |
|--------------------|---------------------------------------|----------|------------|------|--|
| Scarlet Fever ... | 78 | 259 | 317 | 6 | 11 |
| Diphtheria ... | — | 18 | 16 | 1 | 1 |
| Enteric Fever ... | — | 1 | 1 | — | — |
| Puerperal Fever... | — | 4 | 4 | — | — |
| For Observation | — | 1 | 1 | — | — |
| Measles ... | — | 2 | 1 | — | 1 |
| Totals ... | 78 | 285 | 340 | 7 | 16 |

In addition to the disinfection of bedding and clothing taken from infected houses or from the Hospital Wards, it will be seen (page 29) that a considerable amount of work has been done for the Cottage Hospital in disinfecting bedding which has become infected with septic discharges.

The following shews the annual number of patients admitted to the Hospital since its opening, and the percentage of cases of Scarlet Fever removed to Hospital:—

| | Total Number of Cases admitted. | Percentage of Scarlet Fever cases removed. |
|-------------------------|------------------------------------|---|
| 1897 (from October) ... | 26 | — |
| 1898 | 68 | 64% |
| 1899 | 73 | 76% |
| 1900 | 158 | 65% |
| 1901 | 129 | 69% |
| 1902 | 102 | 74.5% |
| 1903 | 169 | 76% |
| 1904 | 298 | 81% |
| 1905 | 160 | 81% |
| 1906 | 141 | 92% |
| 1907 | 420 | 93.8% |
| 1908 | 285 | 90.8% |

For the following statement of expenditure for the year ending 31st December, 1908, I am indebted to the kindness of the Borough Treasurer:—

Expenditure.

| | £ | s. | d. | £ | s. | d. |
|--|-------|----|----|--------|----|----|
| Salaries of Matron, Nurses, etc. | | | | 370 | 13 | 4 |
| Porters' Wages (proportion) | | | | 89 | 2 | 10 |
| Nurses' Uniform | | | | 18 | 18 | 2 |
| Maintenance of Patients and Staff:— | | | | | | |
| Groceries | 224 | 14 | 3 | | | |
| Butchers' Meat | 156 | 10 | 7 | | | |
| Fish, Ice, etc. | 23 | 19 | 11 | | | |
| Vegetables | 22 | 10 | 0 | | | |
| Milk | 164 | 14 | 5 | | | |
| Bread | 69 | 7 | 5 | | | |
| | <hr/> | | | 661 | 16 | 7 |
| Druggists' Sundries | | | | 52 | 7 | 1 |
| Drapery, Crockery, Hardware, Cleaning Materials, etc. | | | | 150 | 8 | 1 |
| Repairs to Vans, Laundry Fittings, Dis- infector, Electric Light Fittings, etc. | | | | 50 | 19 | 4 |
| Maintenance of Buildings, Painting, etc. | | | | 53 | 19 | 3 |
| Gas | | | | 24 | 2 | 3 |
| Electricity | | | | 97 | 1 | 2 |
| Water | | | | 38 | 14 | 2 |
| Rates and Taxes | | | | 52 | 6 | 5 |
| Insurance | | | | 6 | 3 | 1 |
| Telephone Charges | | | | 10 | 16 | 0 |
| Fuel | | | | 227 | 2 | 3 |
| Cultivation of Grounds | | | | 62 | 19 | 1 |
| Horse Hire for Ambulance, etc. | | | | 90 | 14 | 0 |
| Rent of Small-pox Hospital | | | | 20 | 0 | 0 |
| Interest on cost of Electric Main | | | | 13 | 11 | 9 |
| Printing, Stationery, Advertising, and Postages | | | | 12 | 9 | 7 |
| Electric Motor, Hydro-Extractor, etc., for Laundry (balance) | | | | 40 | 5 | 4 |
| Asphalting walks | | | | 43 | 17 | 7 |
| Furniture and Repairs | | | | 1 | 15 | 5 |
| Sundries | | | | 12 | 10 | 0 |
| | | | | <hr/> | | |
| | | | | £2,202 | 12 | 9 |
| | | | | <hr/> | | |

Income.

| | £ | s. | d. |
|---|-------|----|----|
| Removal and Maintenance of Patients | 184 | 3 | 3 |
| Rent of Land | 3 | 0 | 0 |
| Contribution from Cheshire County Council under Isolation Hospital Acts | 261 | 15 | 5 |
| | <hr/> | | |
| | £448 | 18 | 8 |
| | <hr/> | | |

The cost of maintenance per case; the average daily number of patients, and their average residence, etc., since the opening of the Hospital are shewn in the following table:—

| YEAR. | PATIENTS. | | | Total Expenditure. | Average cost per patient. | | | Daily cost per head for provisions. | Provisions. | | |
|-------|-------------------|-----------------------------|----------------------------------|-----------------------|---------------------------------|-------|-------|--|-------------|--|--|
| | Total treated. | Average daily number. | Average residence in days. | | | | | | | | |
| | | | | £ s. d. | £ s. d. | s. d. | s. d. | £ s. d. | | | |
| 1898 | 68 | 9.1 | 48.0 | 1020 2 0 | 15 0 0 | 2 4 | | 378 19 6 | | | |
| 1899 | 73 | 9.6 | 48.0 | 1083 7 1 | 14 16 9 | 1 11½ | | 347 4 9 | | | |
| 1900 | 153 | 20.3 | 47.0 | 1161 11 8 | 7 7 0 | 1 1½ | | 417 19 0 | | | |
| 1901 | 129 | 17.0 | 48.0 | 1367 0 10 | 10 12 0 | 1 5½ | | 452 18 0 | | | |
| 1902 | 102 | 11.7 | 42.0 | 1173 5 9 | 11 10 0 | 1 5½ | | 314 10 7 | | | |
| 1903 | 169 | 22.4 | 48.5 | 1404 6 7 | 8 6 2 | 0 11½ | | 398 19 7 | | | |
| 1904 | 298 | 34.2 | 42.0 | 1642 14 3 | 5 10 3 | 0 10¾ | | 561 2 4 | | | |
| 1905 | 160 | 16.7 | 38.5 | 1592 0 3 | 9 19 0 | 1 7¼ | | 488 19 2 | | | |
| 1906 | 141 | 16.0 | 41.6 | 1108 12 9 | 9 19 9 | 1 3½ | | 384 15 8 | | | |
| 1907 | 420 | 38.8 | 32.7 | 1893 9 1 | 4 10 1 | 0 10¾ | | 601 8 3 | | | |
| 1908 | 285 | 31.3 | 41.1 | 2182 12 9 | 7 13 1 | 1 1¾ | | 661 16 7 | | | |

N.B.—The above calculations of cost do not include repayment of principal, nor payment of interest on capital. The rent of the Smallpox Hospital is also deducted.

The Average Length of Stay in Hospital.

| | |
|--|------|
| Scarlet Fever Patients, excluding cases which died | 42.8 |
| Scarlet Fever Patients, including cases which died | 42.2 |
| Diphtheria and Membraneous Croup Patients, excluding cases which died | 30.6 |
| Diphtheria and Membraneous Croup Patients, including cases which died | 29.3 |

School Hygiene.

This matter is now dealt with in a separate report, but a few facts connected with Infectious Disease in the Schools may be mentioned here.

As previously stated, Measles has been epidemic during the year. The following is a list of schools which have been closed during the year on account of the prevalence of this disease.

| School. | Closed. | Re-opened. | Disease. |
|----------------------------------|---|------------------|----------|
| West Street Council Infants ... | June 12th to beginning of Summer holidays, June 26th | July 27th ... | Measles |
| Beech Street Infants ... | Sept. 3rd to beginning of Autumn holidays, Sept. 11th | September 21st | „ |
| Mill Street Wesleyan Infants ... | September 28th ... | October 12th ... | „ |
| St. Mary's R.C. Infants ... | October 5th ... | „ 19th ... | „ |
| Edleston Road Infants ... | October 19th ... | November 2nd... | „ |
| Borough Infants ... | November 5th ... | „ 23rd... | „ |
| Hightown Council Infants ... | „ 6th ... | „ 23rd... | „ |
| Edleston Road Infants ... | „ 6th ... | „ 23rd... | „ |
| Wistaston Road Infants ... | „ 9th ... | „ 23rd... | „ |
| Bedford Street Infants ... | „ 9th ... | „ 23rd... | „ |
| Broad Street Infants ... | „ 9th ... | „ 23rd... | „ |

The following table shews the number of children excluded from school on account of infectious diseases, and whose absence was notified to the Health Department by the Head Teachers and School Attendance Officers:—

| | Totals 1907 | Totals 1908 |
|-----------------------|----------------|----------------|
| Measles | 25 | 683 |
| Whooping Cough | 93 | 4 |
| Chicken-pox | 90 | 5 |
| Ringworm | 9 | 4 |
| Mumps | 219 | 3 |
| Skin Disease | 14 | — |
| Miscellaneous | 168 | 44 |
| Totals | 618 | 743 |

The following certificates have also been issued in respect of diseases compulsorily notifiable:—

| | |
|---------------------------------|-------|
| Preliminary Certificates | 279 |
| Final Certificates | 169 |
| | <hr/> |
| | 448 |

Playgrounds and Open Spaces.

These owned by the Corporation are:—

The Queen's Park—Area, a little over 35 acres; situate in the South Ward, at the extreme South West Boundary of the town.

South Ward Playground, area 11,501 square yards. West Ward Playground, area 8,356 square yards. North Ward Playground, area 16,429 square yards.

Inspections and General Work.

The premises which have been kept under regular supervision include 15 private slaughter-houses, 53 cowsheds, 135 dairies and milkshops, 9 common lodging-houses, 1 house let in lodgings, 260 factories and workshops, and also premises which are specially liable to create nuisances, viz.: pig-styes, stables, marine stores, fried fish shops, etc.

Reconstruction of Privies, &c.

The following figures give the approximate numbers of the different forms of closets, etc., existing in the town at the end of 1908:—

| | | | | | | |
|-----------------------|-----|-----|-----|-----|-----|-------|
| Water-closets | ... | ... | ... | ... | ... | 6,465 |
| Waste Water-closets | ... | ... | ... | ... | ... | 1,016 |
| Pail Closets | ... | ... | ... | ... | ... | 3,147 |
| Fixed Receptacles | ... | ... | ... | ... | ... | 2 |
| Covered Privy Middens | ... | ... | ... | ... | ... | 681 |
| Uncovered Ashpits | ... | ... | ... | ... | ... | 45 |
| Covered Ashpits | ... | ... | ... | ... | ... | 2,426 |
| Dustbins | ... | ... | ... | ... | ... | 7,010 |
| Baths | ... | ... | ... | ... | ... | 1,771 |

The number of privy middens, etc., converted into water-closets is the same as in the previous year, viz.:— 312. It was not necessary to take proceedings in any instance.

The following shews the number and nature of the re-constructions effected during the year:—

| | Dust- bins. | Covered Ashpits | Privy Pails | Water Closets | Waste Water Closets. |
|--|----------------|--------------------|----------------|------------------|----------------------------|
| 170 Mixens were converted into ... | 78 | 92 | 72 | 98 | — |
| 2 Cesspools „ „ „ ... | — | — | 2 | — | — |
| 70 Privy Pails were converted into ... | — | — | — | 70 | — |
| 69 Ashpits were converted into ... | 69 | — | — | — | — |
| 1 Waste Water-closet was con- verted into ... | — | — | — | 1 | — |

The total number of re-constructions was therefore 312, these being converted into 169 clean water-closets, and 74 privy pails, with 147 dustbins and 92 covered ashpits.

Offensive Trades.

There are now two gut-scraping businesses carried on in the Borough. One of these was established in 1905, in Richmond Road, and the premises are of modern construction. Both businesses from a sanitary point of view are well regulated and have been conducted so as to be free from nuisance.

Cowsheds.

There are 53 Cowsheds in the Borough. These are frequently inspected and suggestions for improvements are made. The standard of cleanliness in some of them is not very high. It is hoped to obtain an improvement in this respect in the near future.

Dairies and Milkshops.

There are 135 premises on the Register where a retail trade in milk is carried on. The chief complaint to be made in regard to these is, as in the case of cowsheds, a want of cleanliness.

The following additional regulation prescribing precautions to be taken by purveyors of milk and persons selling milk by retail in the Borough, against infection or contamination, came into force on August 1st, 1906:—

“Every purveyor of milk or person selling milk by retail
 “shall cause every vessel containing milk for sale to be
 “kept properly covered, or to be otherwise sufficiently
 “protected from contamination by dust or flies.”

Common Lodging Houses.

There are 9 houses in the Borough now registered as common lodging-houses. Every effort is made to see to these being kept in a sanitary condition, and the houses are fairly well conducted. Their defective structural character makes it difficult for the keepers to maintain them in a thoroughly satisfactory state.

Houses Let in Lodgings.

There is one house on the register, and this has been kept in a satisfactory condition.

Slaughter Houses and Meat Inspection.

There are 15 slaughter-houses in the Borough. They are kept in a fairly satisfactory condition. In many instances, however, the offal is not removed frequently enough. The premises are visited periodically by the Inspector and the Medical Officer, and the Butchers themselves, as members of the Butchers' Vigilance Association, report to the Medical Officer any carcasses that are suspected to be diseased. During the year only one carcass has been submitted for examination. The pleura and right lung were found to be slightly tuberculous, but there was no evidence of disease in the glands. The affected portions were destroyed. The value of the beast was £15.

Attention should be directed to the "blowing" of carcasses for sale. This practice is quite unnecessary and should be discontinued, or at least should be done by mechanical means. It is possible for a healthy carcass to be infected in the process of "blowing" if the butcher happens to be suffering from such a disease as Consumption.

Ice Cream Premises.

A constant supervision has been maintained over the premises where ice cream is made and sold. The premises were at all times found in a cleanly condition.

Factories and Workshops.

There are 72 factories and 198 workshops in the Borough. The latter include a great many places, such as dressmakers' establishments, where the business is a small one, and is carried on in a room of the dwelling-house set apart for the purpose. It sometimes happens that in such small workshops the business is carried on somewhat intermittently, and changes of address are frequent. This makes it difficult to keep an absolutely correct register, but so far as possible all changes have been followed up.

The following table of workshops shews the number in each Ward, and the nature of the trades carried on :—

| Trade. | | | | Central | West | North | South | Borough |
|------------------------------------|-----|-----|-----|---------|------|-------|-------|---------|
| Bakers and Confectioners | ... | | | 15 | 7 | 6 | 7 | 35 |
| Dressmakers and Milliners | ... | | | 19 | 8 | 2 | 14 | 43 |
| Tailors | ... | ... | ... | 6 | 1 | 1 | 3 | 11 |
| Watchmakers and Jewellers | ... | | | 4 | 1 | — | 1 | 6 |
| Tinsmiths | ... | ... | ... | 3 | — | — | 1 | 4 |
| Cabinet Makers and Joiners | ... | | | 8 | 2 | 3 | 4 | 17 |
| Bootmakers | ... | ... | ... | 9 | 5 | 7 | 15 | 36 |
| Herb Beer Manufacturers & Bottlers | | | | 1 | 1 | — | — | 2 |
| Saddlers | ... | ... | ... | 3 | — | — | 2 | 5 |
| Cycle Repairers | ... | ... | ... | 2 | 3 | — | 3 | 8 |
| Ice Cream Manufacturers | ... | | | 1 | 1 | — | 1 | 3 |
| Wheelwrights | ... | ... | ... | — | — | — | 1 | 1 |
| Shirtmakers | ... | ... | ... | 1 | — | 1 | — | 2 |
| Hosiers | ... | ... | ... | 1 | — | — | — | 1 |
| Stonemasons | ... | ... | ... | 1 | — | 1 | 1 | 3 |
| Picture Framers | ... | ... | ... | 2 | — | 1 | — | 3 |
| Rag Stores | ... | ... | ... | 1 | — | 2 | — | 3 |
| Blacksmiths | ... | ... | ... | 3 | 1 | 2 | 1 | 7 |
| Laundry | ... | ... | ... | 1 | — | — | — | 1 |
| Artificial Teeth Manufacturers | ... | | | 3 | — | — | 1 | 4 |
| Scales Manufacturer | ... | ... | ... | 1 | — | — | — | 1 |
| Gut Scraper | ... | ... | ... | — | 1 | 1 | — | 2 |
| Totals | ... | ... | ... | 85 | 31 | 27 | 55 | 198 |

GENERAL SANITATION.—The condition of the workshops generally has been very satisfactory, although there were a few exceptions with regard to cleanliness. Ten notices relating to limewashing were sent out and complied with.

BAKEHOUSES.—There are now no underground bakehouses in the Borough. The sanitary condition of all the premises was very satisfactory.

HOMEWORK.—Lists of homeworkers have been received from the following :—

| | | |
|---|----|-------------|
| S. & J. Watts and Co., Clothing Factory ... | 5 | outworkers. |
| Compton & Sons' Clothing Factory | 17 | „ |
| C. Taylor, Shirtmaker | 4 | „ |
| A. Boden, Tailor | 5 | „ |
| J. Harding, Son and Co. | 10 | „ |

The annual statistical return to the Secretary of State, which follows, gives a summary of the work done during the year.

I.—Inspection.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTIONS OR INSPECTORS OF NUISANCES.

| Premises. | Number of | | |
|---|--------------|------------------|---------------|
| | Inspections. | Written Notices. | Prosecutions. |
| Factories (Including Factory Laundries) | 144 | 2 | ... |
| Workshops (Including Workshop Laundries) | 400 | 11 | ... |
| Workplaces other than outworkers' premises included in part III. | ... | ... | ... |
| TOTAL | 544 | 13 | ... |

2.—Defects Found.

| Particulars. | Number of Defects. | | | Number of Prosecutions |
|--|--------------------|----------|----------------------------|------------------------|
| | Found | Remedied | Referred to H.M. Inspector | |
| <i>Nuisances under the Public Health Acts :—*</i> | | | | |
| Want of cleanliness | 11 | 11 | ... | ... |
| Want of ventilation | ... | ... | ... | ... |
| Overcrowding | ... | ... | ... | ... |
| Want of drainage of floors... | ... | ... | ... | ... |
| Other nuisances | ... | ... | ... | ... |
| Sanitary accommodation { insufficient ... unsuitable or defective ... not separate for sexes ... | 2 | 2 | ... | ... |
| <i>Offences under the Factory & Workshop Act :</i> | | | | |
| Illegal occupation of underground bake-house (S. 101) | ... | ... | ... | ... |
| Breach of special sanitary requirements for bakehouses (SS. 97 to 100) ... | ... | ... | ... | ... |
| Other offences :— (Excluding offences relating to out-work which are included in Part III.) | | | | |
| Total | 13 | 13 | ... | ... |

* Including those specified in Sections 2, 3, 7 and 8, of the Factory Act as remedied under the Public Health Acts.

3.—Home Work.

| NATURE OF WORK. | OUTWORKERS' LISTS, SECTION 107. | | | | | | | | | | | OUTWORKERS IN UNWHOLESOME PREMISES, SEC. 108. | | | OUTWORK IN INFECTED PREMISES, SECTIONS 109, 110. | | | |
|---|---------------------------------|----------|-------------------|----------|-------------------------------|------------------------------|--|------------------------|---------------|-----|----|---|------------|-----------------|--|------------|-----------------------|----------------------------------|
| | Lists received from Employers. | | | | Addresses of Outworkers. | | | | Prosecutions. | | | Inspection of Outworkers' Premises. | Instances. | Notices served. | Prosecutions. | Instances. | Orders made (S. 110). | Prosecutions (Sections 109, 110. |
| | Twice in the year. | | Once in the year. | | Received from other Councils. | Forwarded to other Councils. | Failing to keep or permit inspection of Lists. | Failing to send Lists. | | | | | | | | | | |
| | Outworkers. | | Outworkers. | | | | | | | | | | | | | | | |
| | Contractors. | Workmen. | Contractors. | Workmen. | | | | | | | | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| Wearing Apparel :— (1) making ... (2) cleaning and washing... | 12 | ... | 42 | ... | ... | ... | 4 | 4 | ... | ... | 50 | ... | ... | ... | ... | ... | ... | |
| Total | 12 | ... | 42 | ... | ... | ... | 4 | 4 | ... | ... | 50 | ... | ... | ... | ... | ... | ... | |

4.—Registered Workshops.

| Workshops on the Register (S. 131) at the end of the year. | | | | | | Number. |
|--|-----|-----|-----|-----|-----|---------|
| Bakers and Confectioners | ... | ... | ... | ... | ... | 35 |
| Dressmakers and Milliners | ... | ... | ... | ... | ... | 43 |
| Tailors ... | ... | ... | ... | ... | ... | 11 |
| Watchmakers and Jewellers | ... | ... | ... | ... | ... | 6 |
| Tinsmiths | ... | ... | ... | ... | ... | 4 |
| Cabinetmakers and Joiners | ... | ... | ... | ... | ... | 17 |
| Bootmakers and Repairers | ... | ... | ... | ... | ... | 36 |
| Herb Beer Manufacturers and Bottlers | ... | ... | ... | ... | ... | 2 |
| Saddlers ... | ... | ... | ... | ... | ... | 5 |
| Cycle Repairers | ... | ... | ... | ... | ... | 8 |
| Ice Cream Manufacturers | ... | ... | ... | ... | ... | 3 |
| Wheelwrights | ... | ... | ... | ... | ... | 1 |
| Shirtmakers | ... | ... | ... | ... | ... | 2 |
| Hosiers ... | ... | ... | ... | ... | ... | 1 |
| Stonemasons | ... | ... | ... | ... | ... | 3 |
| Picture Framers | ... | ... | ... | ... | ... | 3 |
| Rag Stores | ... | ... | ... | ... | ... | 3 |
| Blacksmiths | ... | ... | ... | ... | ... | 7 |
| Others ... | ... | ... | ... | ... | ... | 8 |
| Total number of workshops on Register | | | | | | 198 |

5.—Other Matters.

| Class. | | | | | | Number. |
|--|-----|-----|-----|-----|-----|---------|
| Matters notified to H.M. Inspector of Factories :— | | | | | | |
| Failure to affix Abstract of the Factory and Workshop Act S. 133) | | | | | | ... |
| Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (S. 5) | | | | | | ... |
| Notified by H.M. Inspector | | | | | | ... |
| Reports (of action taken) sent to H.M. Inspector | | | | | | ... |
| Other ... | ... | ... | ... | ... | ... | ... |
| Underground Bakehouses (S. 101) :— | | | | | | |
| Certificates granted during the year | | | | | | ... |
| In use at the end of the year | | | | | | ... |

The following table shews the number of Factories in the Borough.

| Industry | | | Central | West | North | South | Borough |
|----------------------------------|-----|-----|---------|------|-------|-------|---------|
| Loco. Engine Works ... | ... | ... | — | 1 | — | * | 1 |
| Electric Lighting ... | ... | ... | 3 | — | — | — | 3 |
| Clothing Factories ... | ... | ... | 1 | 1 | 3 | 2 | 7 |
| Cabinet Maker and Joiner | ... | ... | 3 | — | — | — | 3 |
| Cycle Works ... | ... | ... | 1 | — | — | — | 1 |
| Bottling & Herb Beer Manufactory | ... | ... | 2 | — | — | 2 | 4 |
| Brewery ... | ... | ... | 1 | — | — | — | 1 |
| Aerated Water Manufactory | ... | ... | 2 | — | 1 | — | 3 |
| Letterpress Printing ... | ... | ... | 3 | 2 | — | 1 | 6 |
| Laundry ... | ... | ... | — | — | 2 | — | 2 |
| Sausage Maker ... | ... | ... | 3 | 2 | — | 1 | 6 |
| Machine Smith ... | ... | ... | 1 | — | — | — | 1 |
| Wheelwright, Woodturner | ... | ... | 3 | — | 1 | — | 4 |
| Builder ... | ... | ... | 1 | 1 | — | 2 | 4 |
| Blindmaker ... | ... | ... | 1 | — | — | — | 1 |
| Ironfounder ... | ... | ... | 1 | — | — | — | 1 |
| Baker ... | ... | ... | 2 | — | 1 | — | 3 |
| Bootmaker ... | ... | ... | 2 | 1 | — | 2 | 5 |
| Brick Works ... | ... | ... | — | 2 | 4 | — | 6 |
| Fustian Cutting ... | ... | ... | 1 | 1 | — | — | 2 |
| Cattle Medicine ... | ... | ... | — | — | — | 1 | 1 |
| Firewood ... | ... | ... | — | 1 | — | 1 | 2 |
| Saw Mill ... | ... | ... | 1 | 1 | — | — | 2 |
| Chaffcutting ... | ... | ... | — | 2 | — | — | 2 |
| Picture Framer ... | ... | ... | 1 | — | — | — | 1 |
| Totals ... | ... | ... | 33 | 15 | 12 | 12 | 72 |

* These works are also partly in the South Ward.

Sale of Food and Drugs Acts.

These Acts are administered by the County Council, to whose Chief Inspector, Mr. Laird, I am indebted for the following particulars of samples purchased in the Borough of Crewe, under the Sale of Food and Drugs Acts, during the year ending December 31st, 1908.

| Name of Sample. | | | No. of Samples. | No. of Samples certified as Adulterated. |
|-----------------|-----|-----|-----------------|--|
| Butter | ... | ... | 25 | 1 |
| Coffee | ... | ... | 3 | — |
| Milk | ... | ... | 52 | 5 |
| Pepper | ... | ... | 12 | — |
| Rum | ... | ... | 3 | 1 |
| Whiskey | ... | ... | 7 | — |
| Totals | ... | ... | 102 | 7 |

Work done by Sanitary Inspector's Department.

The Sanitary Inspector reports that the following matters have received his attention during the year:—

| | 1907 | 1908 |
|---|------|------|
| Defective house drainage | 196 | 162 |
| „ Manure receptacles | 7 | 6 |
| „ Ashpits | 73 | 98 |
| „ Privy middens | 245 | 305 |
| „ Pail privies | 131 | 237 |
| „ Fixed receptacles | 12 | 0 |
| „ Cesspool privies | 7 | 0 |
| „ Water-closets | 62 | 77 |
| „ Paving of yards and passages | 14 | 72 |
| „ Urinals | 2 | 5 |
| „ Eaves and rain-water spouting | 32 | 51 |
| „ Ventilating shafts (drains) | 2 | 13 |
| „ Channel shoots | 6 | 41 |
| „ Sink pipes | 13 | 23 |
| Nuisances from offensive accumulations | 9 | 19 |
| „ „ keeping of animals | 7 | 7 |
| „ „ stagnant water in cellars | 1 | 7 |
| „ „ offensive pools, ditches, etc. | 4 | 5 |
| „ „ smoke | 4 | 2 |
| House drains tested | 43 | 94 |
| Visits to cowsheds | 76 | 88 |
| „ Common lodging-houses | 126 | 111 |
| „ slaughter-houses | 201 | 237 |
| „ Infectious disease cases | 507 | 363 |
| Notices for renewal of defective privies and ashpails | 465 | 425 |
| Licenses issued in respect to removal of Swine ... | 3861 | 4053 |
| „ Ditto ditto Sheep ... | | 518 |

| | 1907 | 1908 |
|--|------|------|
| Post Cards issued in respect of removal of Swine— | | |
| County | 2687 | 3238 |
| Statutory notices served | 284 | 237 |
| Persons supplied with disinfectants on application | | |
| to office | 1025 | 1024 |
| Dogs destroyed | 58 | 56 |
| Cats „ | 3 | 3 |
| Visits to Ice Cream Shops | 14 | 15 |
| „ „ Bakehouses | 78 | 70 |
| „ „ Fried Fish Shops | 172 | 58 |
| „ „ Pigstyes | 60 | 70 |
| „ „ Offensive trades | 21 | 27 |

Scavenging.

In the accompanying Tables the work done during the year and the cost of both team and manual labour are given in detail, and for comparison the work for each year since 1899 is also shewn.

It will be seen that as compared with 1907, the total cost of scavenging has decreased £27 3s. 5d., while the cost per load of day and night work has also decreased.

TABLE shewing total cost, number of loads, etc., for day and night work.

| MONTH, 1908 | DAY WORK. | | | | | NIGHT WORK. | | | | |
|----------------|------------------|-----------------------|-----------------------------|------------------|---|------------------|-----------------------|------------------|---|--|
| | Wages £ s. d. | Horse Hire £ s. d. | Paper Wagon Hire £ s. d. | Total £ s. d. | Average Cost per Working Day £ s. d. | Wages £ s. d. | Horse Hire £ s. d. | Total £ s. d. | Average Cost per Working Night £ s. d. | |
| | | | | | | | | | | |
| January | 106 19 4 | 42 10 6 | 0 6 0 | 149 15 10 | 5 10 11½ | 79 12 4 | 23 12 6 | 103 4 10 | 4 9 9¼ | |
| February | 99 1 5 | 39 7 6 | 0 6 0 | 138 14 11 | 5 10 11½ | 68 10 0 | 21 17 6 | 90 7 6 | 4 6 0¼ | |
| March | 103 16 10 | 40 19 0 | 0 6 0 | 145 1 10 | 5 11 7¾ | 76 5 4 | 22 15 0 | 99 0 4 | 4 10 0 | |
| April | 110 12 9 | 42 17 6 | 0 6 0 | 153 16 3 | 5 18 3¾ | 75 15 0 | 21 3 6 | 96 18 6 | 4 4 3¼ | |
| May | 112 11 10 | 45 13 6 | 0 6 0 | 158 11 4 | 6 1 11½ | 67 0 4 | 17 10 0 | 84 10 4 | 3 5 0 | |
| June | 111 11 2 | 43 1 0 | 0 6 0 | 154 18 2 | 5 19 1¼ | 71 7 6 | 18 18 0 | 90 5 6 | 3 9 5¼ | |
| July | 113 2 11 | 42 14 0 | 0 6 0 | 156 2 11 | 5 15 7¼ | 76 14 10 | 20 2 6 | 96 17 4 | 3 11 9 | |
| August | 111 3 0 | 40 19 0 | 0 6 0 | 152 8 0 | 5 17 2¼ | 69 1 1 | 18 4 0 | 87 5 1 | 3 7 1¼ | |
| September | 109 8 7 | 40 19 0 | 0 6 0 | 150 13 7 | 5 15 10¾ | 69 14 6 | 18 4 0 | 87 18 6 | 3 7 7½ | |
| October | 111 11 11 | 42 10 6 | 0 6 0 | 154 8 5 | 5 14 4½ | 71 1 10 | 18 18 0 | 89 19 10 | 3 6 3¼ | |
| November | 104 1 3 | 39 7 6 | 0 6 0 | 143 14 9 | 5 15 0 | 67 16 9 | 17 10 0 | 85 6 9 | 3 8 3¼ | |
| December | 103 9 5 | 39 7 6 | 0 6 0 | 143 2 11 | 5 6 0½ | 72 11 0 | 18 14 6 | 91 5 6 | 3 7 7¼ | |
| | 1297 10 5 | 500 6 6 | 3 12 0 | 1801 8 11 | 5 14 9 | 865 10 6 | 237 9 6 | 1103 0 0 | 3 14 5¼ | |

| MONTH. | No. of Loads Removed. | | | Average Cost per Load. | |
|-----------|-----------------------|------------|--|------------------------|------------|
| | Day Work | Night Work | | Day | Night |
| | | | | | |
| January | 883 | 367 | | s. d. 3 4½ | s. d. 5 7¼ |
| February | 803 | 316 | | 3 5½ | 5 8½ |
| March | 871 | 343 | | 3 3¾ | 4 5½ |
| April | 901 | 331 | | 3 4¾ | 5 10¼ |
| May | 920 | 287 | | 3 5 | 5 10½ |
| June | 919 | 313 | | 3 4¼ | 5 9¼ |
| July | 873 | 324 | | 3 6 | 5 11¾ |
| August | 862 | 302 | | 3 6¼ | 5 9¼ |
| September | 872 | 302 | | 3 5¼ | 5 9¾ |
| October | 883 | 304 | | 3 5¾ | 5 11 |
| November | 839 | 302 | | 3 4¾ | 5 7¾ |
| December | 772 | 284 | | 3 2¾ | 6 5 |
| | 10398 | 3775 | | 3 4¾ | 5 9¾ |

TABLE shewing number of privies and dustbins emptied and cost per load, etc.

| | 1899 | 1900 | 1901 | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 |
|---------------------------------|----------------------|---------------------|---------------------|---------------------|---------------------|-----------|----------------------|---------------------|----------------------|---------------------|
| Privies and Ashpits emptied ... | 31,962 | 33,455 | 25,171 | 20,617 | 25,485 | 28,371 | 29,381 | 20,136 | 21,166 | 23,820 |
| Privy Pails emptied ... | 128,086 | 129,086 | 129,656 | 132,432 | 145,038 | 154,570 | 156,003 | 157,365 | 157,573 | 157,079 |
| Dustbins ... | 79,920 | 93,180 | 104,260 | 112,510 | 138,585 | 176,956 | 183,414 | 184,163 | 194,919 | 199,477 |
| Paper Bags ... | — | — | — | — | 11,160 | 11,388 | 13,405 | 17,675 | 16,844 | 18,578 |
| Number of Loads removed— | | | | | | | | | | |
| Day Work ... | 8,525 | 9,099 | 8,803 | 9,851 | 10,225 | 10,325 | 9,825 | 8,970 | 10,073 | 10,408 |
| Night Work ... | 4,967 | 4,958 | 4,940 | 4,880 | 5,130 | 5,290 | 4,879 | 4,456 | 4,070 | 3,775 |
| | 13,492 | 14,057 | 13,743 | 14,731 | 15,355 | 15,618 | 14,704 | 13,426 | 14,143 | 14,183 |
| Cost of removal— | £ s. d. | £ s. d. | £ s. d. | £ s. d. | £ s. d. | £ s. d. | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| Total cost ... | 2649 8 5 | 2812 1 2 | 2827 8 11 | 2984 9 3 | 3007 9 9 | 3068 16 7 | 2923 9 6 | 2850 18 3 | 2931 12 4 | 2904 8 11 |
| Cost per load ... | 0 3 11 | 0 4 0 | 0 4 1 $\frac{1}{4}$ | 0 4 0 $\frac{1}{2}$ | 0 3 11 | 0 3 11 | 0 3 11 $\frac{1}{2}$ | 0 4 2 $\frac{3}{4}$ | 0 4 1 $\frac{1}{2}$ | 0 4 1 $\frac{1}{4}$ |
| Cost of Day Work per load ... | 0 2 11 $\frac{1}{2}$ | 0 3 1 $\frac{1}{2}$ | 0 3 2 $\frac{1}{2}$ | 0 3 0 $\frac{1}{4}$ | 0 3 3 $\frac{3}{4}$ | 0 3 3 | 0 3 3 $\frac{1}{4}$ | 0 3 6 $\frac{1}{4}$ | 0 3 6 $\frac{3}{4}$ | 0 3 4 $\frac{3}{4}$ |
| Cost of Night Work per load ... | 0 5 6 $\frac{1}{2}$ | 0 5 6 $\frac{3}{4}$ | 0 5 8 $\frac{3}{4}$ | 0 6 1 $\frac{1}{4}$ | 0 5 1 | 0 5 3 | 0 5 4 $\frac{1}{2}$ | 0 5 8 | 0 5 10 $\frac{1}{2}$ | 0 5 9 $\frac{3}{4}$ |

Water Supply.

The Water Supply is owned by the London and North Western Railway Company, and is obtained from artesian wells at Whitmore, Staffordshire. The quality of the water for drinking purposes is excellent, although somewhat hard for domestic and laundry use. The supply has never failed even after the most prolonged drought.

The total quantity of water given below is the amount actually paid for to the Railway Company, plus $20\frac{1}{2}$ million gallons, the estimated amount supplied directly by the Company to their own property.

| Year | Quantity consumed during the year in gallons | No. of Inhabited Houses | Population estimated to middle of year | Consumption per house per annum in gallons | Consumption per head of Population per day in gallons |
|------|--|-------------------------|--|--|---|
| 1893 | 116,348,000 | 7,125 | 34,866 | 16,329 | 9'14 |
| 1894 | 134,269,300 | 7,190 | 35,796 | 18,674 | 9'47 |
| 1895 | 139,736,000 | 7,404 | 36,726 | 18,873 | 10'42 |
| 1896 | 148,833,000 | 7,638 | 37,656 | 19,485 | 10'79 |
| 1897 | 149,088,000 | 7,945 | 38,586 | 18,765 | 10'58 |
| 1898 | 160,555,000 | 8,182 | 39,516 | 19,622 | 11'13 |
| 1899 | 175,551,000 | 8,582 | 40,446 | 20,455 | 11'88 |
| 1900 | 185,026,000 | 8,808 | 41,376 | 21,006 | 12'24 |
| 1901 | 220,601,500 | 8,771 | 42,307 | 25,151 | 14'28 |
| 1902 | 228,114,000 | 9,208 | 43,237 | 24,773 | 14'45 |
| 1903 | 243,332,390 | 9,500 | 45,505 | 25,613 | 14'6 |
| 1904 | 233,131,113 | 9,617 | 46,065 | 24,273 | 13'8 |
| 1905 | 201,038,120 | 9,724 | 46,578 | 20,674 | 11'8 |
| 1906 | 198,424,000 | 9,844 | 47,142 | 20,156 | 11'5 |
| 1907 | 213,841,000 | 10,001 | 47,904 | 21,381 | 12'2 |
| 1908 | 197,435,470 | 10,096 | 48,359 | 19,555 | 11'2 |

Sewage Disposal.

The bulk of the sewage is being disposed of on the Corporation Farm, and a small proportion by the double contact method. Toward the end of 1907 a new circular continuous filter was constructed on the site of one of the secondary contact beds. The samples taken immediately after it had started work were naturally not satisfactory, but after several months' working an effluent well within the requirements of the County Council has been produced.

Back Passages.

The paving of the following back passages has been completed during the year:—

1. South side of Catherine Street.
2. Catherine Street (opposite Edward Street) to rear of Catherine Street (South side).
3. Between Sherwin Street and Swinnerton Street.
4. Rear of Nantwich Road (South side), from Sherwin Street to Swinnerton Street.
5. Between Market Street and Market Terrace.
6. Between Grosvenor Street and West Street.
7. Behind Nos. 10 to 36, Bedford Street.

Prosecutions, &c.

The following is a summary of the proceedings taken during the year to enforce Statutory Notices issued for the abatement of various nuisances, or for infringement of bye-laws:—

| No. | Nature of Offence. | Result of Proceedings. |
|-----|--|--|
| 1. | Offensive cesspool. | Work done. |
| 2. | Nuisance from worn-out privy pail. | Defendant put in new privy pail and paid 3/6 costs. Summons withdrawn. |
| 3. | „ „ „ | Ditto. |
| 4. | Nuisance from defective privy. | Defendant did work and paid 4/6 costs. Summons withdrawn. |
| 5. | Nuisance from worn-out privy-pail. | Defendant provided new privy pail, and paid costs, 11/- |
| 6. | Exposing sheep suffering from scab in a pen adjoining Lloyd's Cattle Market. | Defendant fined £1 with £1 4s. 0d. costs. |

Sewers and Sewer Ventilation.

New sewers were laid in the following streets:—

Clifton Street.
Elizabeth Street
Fletcher Street.
Passage between Grosvenor Street and West Street.
„ behind Nos. 10 to 36 Bedford Street.
Rear of 17 houses on West side of Ruskin Road.
Denver Avenue.
Stewart Street.

There were no sewer ventilating shafts erected during 1908.

Unwholesome and Dirty Houses.

Notices were issued for the cleansing and limewashing of 122 houses. In 30 instances a second notice had to be issued before the work was carried out.

Contagious Diseases of Animals.

The Sanitary Inspector acts also as Inspector under the Contagious Diseases (Animals) Act and the Swine Fever Order. Every Monday he is in attendance at the Cattle Market to receive declarations regarding swine brought for sale and to give orders for removal of swine from the market.

The number of licences issued by him for the removal of swine was 4,053, as against 3,861 for 1907.

Several blood specimens from animals which had died suddenly were examined by the Medical Officer for the Veterinary Surgeon.

Poor Law Relief Statistics.

I am indebted to Mr. C. E. Speakman, Clerk to the Poor Law Guardians, for the following information. The figures in each case are for the half-year ending Michaelmas.

| | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 |
|---|-------|------------|-------|------------|-------------|-----------|
| 1. In Workhouse ... | | | | | | |
| Able-bodied ... | 168 | 83 | 176 | 60 | 14 | 191 |
| Not able-bodied... | 141 | 75 | 169 | 296 | 367 | 202 |
| Insane ... | 13 | 5 | 15 | 15 | 16 | 17 |
| Children ... | 110 | 72 | 119 | 139 | 116 | 151 |
| Total ... | 432 | 235 | 479 | 510 | 513 | 561 |
| 2. Vagrants relieved in Workhouse... | 4216 | 4601 | 2862 | 2786 | 2616 | 3604 |
| 3. Out-door Poor relieved ... | 899 | 1001 | 994 | 1114 | 1077 | 1066 |
| Ditto Vagrants ... | 922 | 660 | 7 | 45 | 45 | 131 |
| 4. Cost of out-door relief ... | £2045 | £2229 11 6 | £2260 | £2355 12 7 | £2153 14 10 | £2230 1 3 |

METEOROLOGY.—Mr. M. Morgan, the Curator of Queen's Park, has kindly furnished the figures for the following table.

| 1908 | Total Rainfall in inches | No. of Rainy Days | PREVAILING WIND IN DAYS: | | | | | | | | MEAN TEMPERATURE. | | | |
|-------------|-----------------------------|----------------------|--------------------------|----|----|----|------|------|------|------|----------------------|----------------------|---------------------|----------------------|
| | | | N. | S. | E. | W. | N.W. | N.E. | S.W. | S.E. | Max'm in Shade | Min'm in Shade | One foot deep | Four foot deep |
| January ... | 0.98 | 7 | — | 6 | 3 | 1 | 3 | 2 | 8 | 8 | 39 | 26 | 36 | 40 |
| February | 1.26 | 11 | — | 1 | — | 9 | 9 | — | 9 | 1 | 43 | 33 | 39 | 41 |
| March ... | 1.90 | 10 | 1 | — | 2 | 5 | 7 | 4 | 6 | 6 | 43 | 30 | 35 | 41 |
| April ... | 1.79 | 6 | 2 | 2 | 4 | 2 | 9 | 6 | 3 | 2 | 50 | 33 | 42 | 42 |
| May ... | 1.99 | 11 | — | 4 | 3 | 1 | 4 | 1 | 10 | 8 | 66 | 42 | 52 | 47 |
| June ... | 1.37 | 7 | 1 | 2 | 8 | 5 | 10 | — | 1 | 3 | 71 | 43 | 58 | 53 |
| July ... | 2.75 | 8 | — | 2 | 3 | 6 | 8 | — | 8 | 4 | 71 | 47 | 61 | 57 |
| August ... | 2.86 | 10 | — | 1 | 5 | 3 | 11 | 3 | 7 | 1 | 67 | 45 | 59 | 57 |
| September | 2.66 | 14 | 1 | 1 | 1 | 2 | 5 | — | 9 | 11 | 63 | 44 | 55 | 55 |
| October ... | 1.50 | 4 | 2 | 1 | 1 | — | — | 1 | — | 26 | 61 | 42 | 54 | 55 |
| November | 1.77 | 7 | — | 2 | 2 | 3 | 4 | — | 8 | 11 | 49 | 33 | 46 | 50 |
| December | 1.75 | 23 | — | 5 | 1 | 1 | 3 | 1 | 4 | 16 | 41 | 30 | 41 | 46 |
| Total ... | 22.58 | 118 | 7 | 27 | 33 | 38 | 73 | 18 | 73 | 97 | — | — | — | — |

As compared with 1907 there were 4.58 inches less of rainfall but 5 more rainy days. The heaviest rainfall occurred in July, August and September, during which months 8.27 inches fell, as compared with 5.10 in 1907. October was an unusually dry month.

LOCAL GOVERNMENT BOARD RETURN.

TABLE I.—Vital Statistics of whole district during 1908 and previous years.

| YEAR | Population estimated to Middle of each Year. | Births. | | Total Deaths Registered in the District. | | | | Deaths of Non- residents registered in Public Institutions in the District. | Deaths of Residents registered in Public Institutions beyond the District. | Net Deaths at all Ages belonging to the District. | | |
|-------------------------------------|---|---------|--------|--|--------|---|------|--|--|--|-----|-------|
| | | Rate.* | | At all Ages. | | Total Deaths in Public Institutions in the District. | | | | | | |
| | | Number. | Rate.* | Number. | Rate.* | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 1898 | 39516 | 1365 | 34.5 | 232 | 169 | 683 | 17.2 | 20 | 9 | 25 | 699 | 17.6 |
| 1899 | 40446 | 1400 | 34.6 | 231 | 165 | 667 | 16.4 | 16 | 4 | 32 | 695 | 17.1 |
| 1900 | 41376 | 1420 | 34.3 | 196 | 133 | 653 | 15.7 | 19 | 7 | 31 | 677 | 16.3 |
| 1901 | 42307 | 1311 | 30.9 | 234 | 173 | 685 | 16.1 | 26 | 2 | 27 | 710 | 16.7 |
| 1902 | 43237 | 1412 | 32.6 | 186 | 131 | 613 | 14.1 | 24 | 2 | 37 | 648 | 14.9 |
| 1903 | 45505 | 1454 | 31.9 | 210 | 145 | 636 | 14.3 | 36 | 6 | 21 | 651 | 14.3 |
| 1904 | 46065 | 1425 | 30.9 | 226 | 150 | 659 | 14.3 | 20 | 5 | 19 | 673 | 14.6 |
| 1905 | 46578 | 1318 | 28.2 | 171 | 129 | 602 | 12.9 | 36 | 7 | 34 | 629 | 13.5 |
| 1906 | 47142 | 1260 | 26.7 | 149 | 118 | 525 | 11.1 | 22 | 6 | 41 | 560 | 11.8 |
| 1907 | 47904 | 1251 | 26.1 | 136 | 108 | 518 | 10.8 | 32 | 7 | 25 | 536 | 11.1 |
| Averages for years 1898-1907. | 44007 | 1361 | 31.0 | 197 | 144 | 624 | 14.2 | 25 | 5 | 29 | 647 | 14.7 |
| 1908 | 48359 | 1193 | 24.6 | 124 | 103 | 514 | 10.6 | 24 | 6 | 27 | 535 | 11.06 |

* Rates in Columns 4, 8, and 13 calculated per 1000 of estimated population.

Area of District in acres (exclusive of area covered by water) ... 2185

Total Population at all ages ... 42074

Number of Inhabited Houses ... 8771

Average number of persons per House ... 4.79

At Census of 1901

LOCAL GOVERNMENT BOARD RETURN.

TABLE II.—Vital Statistics of separate localities in 1908 and previous years.

| Names of Localities. | 1. BOROUGH. | | | | 2. CENTRAL WARD. | | | 3. WEST WARD. | | | 4. NORTH WARD. | | | 5. SOUTH WARD. | | |
|--------------------------------------|--|--------------------|------------------------|-------------------------|--|------------------------|-------------------------|--|------------------------|-------------------------|--|------------------------|-------------------------|--|------------------------|-------------------------|
| | Population esti- mated to middle of each year. | Births registered. | Deaths at all Ages. | Deaths under 1 year. | Population esti- mated to middle of each year. | Deaths at all Ages. | Deaths under 1 year. | Population esti- mated to middle of each year. | Deaths at all Ages. | Deaths under 1 year. | Population esti- mated to middle of each year. | Deaths at all Ages. | Deaths under 1 year. | Population esti- mated to middle of each year. | Deaths at all Ages. | Deaths under 1 year. |
| 1898 | 39516 | 1365 | 699 | 232 | 8779 | 185 | 54 | 8897 | 155 | 49 | 9545 | 163 | 61 | 12295 | 171 | 68 |
| 1899 | 40446 | 1400 | 695 | 231 | 8986 | 193 | 60 | 9104 | 164 | 57 | 9767 | 155 | 54 | 12587 | 162 | 60 |
| 1900 | 41376 | 1420 | 677 | 196 | 9183 | 174 | 50 | 9311 | 162 | 52 | 9993 | 152 | 44 | 12879 | 167 | 50 |
| 1901 | 42307 | 1311 | 710 | 238 | 9400 | 165 | 43 | 9518 | 171 | 65 | 10217 | 168 | 64 | 13172 | 188 | 62 |
| 1902 | 43237 | 1412 | 648 | 186 | 9607 | 138 | 30 | 9725 | 166 | 48 | 10441 | 157 | 62 | 13464 | 158 | 44 |
| 1903 | 45505 | 1454 | 651 | 211 | 10111 | 160 | 50 | 10236 | 148 | 52 | 10989 | 128 | 46 | 14168 | 194 | 62 |
| 1904 | 46065 | 1425 | 673 | 228 | 10235 | 120 | 37 | 10363 | 157 | 57 | 11123 | 168 | 61 | 14344 | 209 | 73 |
| 1905 | 46578 | 1318 | 629 | 173 | 10350 | 126 | 23 | 10478 | 134 | 41 | 11246 | 146 | 55 | 14504 | 189 | 52 |
| 1906 | 47142 | 1260 | 560 | 149 | 10476 | 117 | 34 | 10603 | 158 | 37 | 11383 | 114 | 35 | 14680 | 136 | 41 |
| 1907 | 47904 | 1251 | 536 | 136 | 10645 | 135 | 28 | 10775 | 127 | 40 | 11567 | 119 | 34 | 14917 | 134 | 33 |
| Averages of years 1898 to 1907 | 44007 | 1361 | 647 | 198 | 9777 | 151 | 40 | 9961 | 154 | 49 | 10627 | 147 | 51 | 13701 | 170 | 54 |
| 1908 | 48359 | 1193 | *535†124 | | 10747 | 106 | 23 | 10878 | 140 | 44 | 11676 | 112 | 18 | 15058 | 153 | 36 |

* 24 of these deaths could not be obtained and are therefore omitted from the Wards.

† 3 in Nantwich Workhouse.

LOCAL GOVERNMENT BOARD RETURN.

TABLE III.—Cases of Infectious Disease notified during the year 1908.

| NOTIFIABLE DISEASE. | Cases Notified in whole District. | | | | | | Total Cases Notified in each Locality. | | | | No. of Cases removed to Hospital from each Locality. | | | | |
|--|-----------------------------------|----------------|--------|---------|----------|----------|--|-----------|----------------|------------|--|-----------|----------------|------------|---------------------------------|
| | At all Ages. | At Ages—Years. | | | | | Central Ward | West Ward | North Ward (H) | South Ward | Central Ward | West Ward | North Ward (H) | South Ward | Total cases removed to Hospital |
| | | Under 1 | 1 to 5 | 5 to 15 | 15 to 25 | 25 to 65 | | | | | | | | | |
| Diphtheria (including Membranous Croup)... | 39 | 1 | 13 | 21 | 2 | 2 | 4 | 8 | 12 | 15 | 2 | 5 | 3 | 8 | 18 |
| Erysipelas ... | 19 | 1 | 1 | 1 | 2 | 11 | 2 | 7 | 2 | 8 | ... | ... | ... | ... | ... |
| Scarlet Fever | 296 | 4 | 70 | 197 | 16 | 9 | 60 | 59 | 97 | 80 | 55 | 53 | 83 | 68 | 259 |
| Enteric Fever | 4 | ... | 1 | 1 | 2 | ... | ... | ... | ... | 4 | ... | ... | ... | 1 | 1 |
| Puerperal Fever | 5 | ... | ... | ... | ... | 5 | 2 | 1 | ... | 2 | 1 | 1 | ... | 2 | 4 |
| Totals ... | 363 | 6 | 85 | 220 | 22 | 27 | 68 | 75 | 111 | 109 | 58 | 59 | 86 | 79 | 282 |

Creve Isolation Hospital is situate in the North Ward marked (H).

Total available beds 48.

Number of diseases that can be concurrently treated 5.

LOCAL GOVERNMENT BOARD.

TABLE IV.—Causes of, and Ages at, Death during year 1908.

| CAUSES OF DEATH. | Deaths at the subjoined ages of "Residents" whether occurring in or beyond the District. | | | | | | | | Deaths in or belonging to Localities at all Ages. | | | | | Total Deaths in Public Institutions in the District |
|--|--|---------------|----------------|-----------------|------------------|------------------|-----------------|---------------|---|-------------|-------------|-------------------------------|-----|---|
| | All Ages. | Under 1 year. | 1 and under 5. | 5 and under 15. | 15 and under 25. | 25 and under 65. | 65 and upwards. | Central Ward. | West Ward. | North Ward. | South Ward. | Address could not be obtained | | |
| Measles ... | 7 | 3 | 4 | ... | ... | ... | ... | 2 | 1 | 2 | 2 | ... | 1 | |
| Scarlet Fever ... | 6 | ... | 5 | 1 | ... | ... | ... | 1 | ... | 3 | 2 | ... | 6 | |
| Whooping Cough ... | 4 | 2 | 1 | 1 | ... | ... | ... | 1 | 2 | ... | 1 | ... | ... | |
| Diphtheria (including Membranous Croup)... | 8 | ... | 6 | 1 | ... | ... | ... | ... | 2 | 4 | 1 | ... | ... | |
| Enteric Fever ... | 1 | ... | 1 | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 1 | |
| Epidemic Influenza ... | 9 | 1 | ... | ... | 3 | 5 | ... | 3 | 1 | 1 | 4 | ... | ... | |
| Diarrhoea ... | 27 | 23 | 3 | ... | ... | ... | 1 | 6 | 13 | 1 | 5 | 2 | ... | |
| Enteritis.... | 7 | ... | 2 | ... | ... | 5 | ... | 1 | 5 | 1 | ... | ... | ... | |
| Puerperal Fever ... | 2 | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | 2 | ... | 1 | |
| Erysipelas ... | 2 | 1 | ... | ... | 1 | ... | ... | ... | 1 | 1 | ... | ... | ... | |
| Phthisis (Pulmonary Tuberculosis) | 22 | ... | ... | 1 | 4 | 16 | 1 | 3 | 6 | 4 | 6 | 3 | ... | |
| Other Tubercular Diseases ... | 20 | 3 | 6 | 4 | 3 | 4 | ... | 5 | 5 | 3 | 5 | 2 | 1 | |
| Cancer, Malignant Disease ... | 31 | ... | ... | ... | ... | 18 | 13 | 8 | 5 | 8 | 9 | 1 | ... | |
| Bronchitis ... | 46 | 16 | 3 | ... | ... | 9 | 18 | 12 | 16 | 6 | 10 | 2 | ... | |
| Pneumonia ... | 52 | 9 | 11 | 3 | 3 | 21 | 5 | 9 | 16 | 12 | 14 | 1 | 1 | |
| Other Diseases of Respiratory Organs | 6 | ... | 2 | ... | ... | 3 | 1 | 1 | 3 | 1 | 1 | ... | 1 | |
| Alcoholism, Cirrhosis of Liver ... | 6 | ... | ... | ... | ... | 6 | ... | 1 | 2 | 1 | 2 | ... | ... | |
| Veneral Diseases ... | 4 | 4 | ... | ... | ... | ... | ... | ... | 1 | 1 | 1 | 1 | ... | |
| Premature Birth ... | 18 | 18 | ... | ... | ... | ... | ... | 4 | 5 | 5 | 4 | ... | ... | |
| Diseases and Accidents of Parturition | 4 | ... | ... | ... | ... | 4 | ... | 3 | ... | 1 | ... | ... | ... | |
| Heart Diseases ... | 58 | ... | ... | 1 | 3 | 36 | 18 | 13 | 11 | 10 | 18 | 6 | 1 | |
| Accidents ... | 15 | 1 | 2 | ... | 1 | 6 | 5 | 1 | 4 | 6 | 3 | 1 | 5 | |
| Suicides ... | 5 | ... | ... | 1 | 1 | 3 | ... | ... | ... | 3 | 2 | ... | ... | |
| All other Causes ... | 175 | 42 | 12 | 1 | 4 | 57 | 59 | 31 | 41 | 38 | 60 | 5 | 6 | |
| All Causes ... | 535 | 124 | 58 | 14 | 24 | 194 | 121 | 106 | 140 | 112 | 153 | 24 | 24 | |

LOCAL GOVERNMENT BOARD RETURN.

TABLE V.—Infantile Mortality during the year 1908.

| CAUSE OF DEATH. | | Under 1 Week. | 1-2 Weeks. | 2-3 Weeks. | 3-4 Weeks. | Total under 1 Month. | 1-2 Months. | 2-3 Months. | 3-4 Months. | 4-5 Months. | 5-6 Months. | 6-7 Months. | 7-8 Months. | 8-9 Months. | 9-10 Months. | 10-11 Months. | 11-12 Months. | Total Deaths under One Year. |
|--|-----|---------------|------------|------------|------------|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|------------------------------|
| All causes { Certified ... Uncertified ... | ... | 13 | 8 | 8 | 5 | 34 | 15 | 12 | 7 | 11 | 8 | 6 | 5 | 2 | 9 | 9 | 4 | 122 |
| | ... | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | 2 |
| Measles | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | 2 | ... | 3 |
| Whooping Cough | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 |
| Diarrhoea, all forms | ... | ... | ... | ... | 1 | 1 | 3 | 1 | ... | 6 | 1 | ... | 1 | ... | 1 | ... | ... | 14 |
| Enteritis, Muco-enteritis, Gastro-enteritis | ... | ... | 1 | ... | ... | 1 | ... | 1 | ... | ... | 1 | 2 | ... | ... | 2 | ... | ... | 7 |
| Gastritis, Gastro-intestinal Catarrh | ... | ... | ... | ... | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 |
| Premature Birth | ... | 8 | 3 | 4 | 1 | 16 | 1 | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 18 |
| Congenital Defects | ... | 1 | 1 | 2 | ... | 4 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 4 |
| Atrophy, Debility, Marasmus | ... | 3 | 1 | 1 | ... | 5 | 3 | 5 | 2 | 1 | 2 | ... | 1 | ... | ... | 1 | ... | 20 |
| Tuberculous Peritonitis : Tabes Mesenterica | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | 1 |
| Other Tuberculous Diseases | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | 2 |
| Erysipelas | ... | ... | ... | ... | ... | ... | 1 | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 1 |
| Syphilis | ... | ... | 1 | ... | 1 | 2 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 4 |
| Rickets | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 3 |
| Meningitis (not Tuberculous) | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 |
| Convulsions | ... | 2 | ... | 1 | ... | 3 | 1 | ... | 1 | ... | 1 | ... | ... | 1 | 1 | ... | ... | 8 |
| Bronchitis | ... | ... | ... | ... | 1 | 1 | 2 | 3 | 1 | 1 | ... | ... | 2 | 2 | 3 | 4 | 1 | 16 |
| Pneumonia | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 2 | 1 | 1 | ... | ... | ... | ... | ... | 9 |
| Suffocation, overlying | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | 1 |
| Other causes | ... | ... | 1 | ... | ... | 1 | 2 | ... | 1 | ... | ... | 2 | 1 | ... | ... | ... | 1 | 2 |
| All Causes | ... | 14 | 8 | 8 | 5 | 35 | 15 | 12 | 7 | 11 | 8 | 6 | 5 | 3 | 9 | 9 | 4 | 124 |

Births in the { Legitimate, 1,157. Deaths in the { Legitimate Infants, 119.
year { Illegitimate, 36. year of { Illegitimate Infants, 5.

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Classification of Deaths in the Borough of Crewe during 1908.

| | 0-1 Year. | 1-5 | 5-15 | 15-25 | 25-65 | Over 65 | Total 1908 | 1909 |
|---|--------------|-----|------|-------|-------|------------|---------------|------|
| | | | | | | | | |
| I. SPECIFIC FEBRILE OR ZYMOTIC DISEASES. | | | | | | | | |
| 1.—MIASMATIC DISEASES. | | | | | | | | |
| Smallpox... { Vaccinated | | | | | | | | |
| { Unvaccinated | | | | | | | | |
| { No Statement | | | | | | | | |
| Chickenpox ... | | | | | | | | |
| Measles ... | 3 | 1 | 1 | | | | 7 | 2 |
| Scarlet Fever ... | | 5 | | | | | 6 | 6 |
| Typhus ... | | | | | | | | |
| Relapsing Fever ... | | | | | | | 1 | 12 |
| Whooping Cough ... | | | | | | | 8 | 6 |
| Mumps ... | | | 1 | 1 | | | | |
| Diphtheria and Membranous Croup ... | | 6 | 1 | | | | | |
| Cerebrospinal Fever ... | | | | | | | 1 | 3 |
| Simple Continued and Ill-defined Fever ... | | | | | | | 1 | 9 |
| Enteric or Typhoid Fever ... | | 1 | | 3 | 5 | | | |
| Influenza ... | 1 | | | | | | | |
| Other Miasmatic Diseases ... | | | | | | | | |
| 2.—DIARRHOEAL DISEASES. | | | | | | | | |
| Cholera ... | 14 | 3 | | | | | | |
| Diarrhoea ... | | | | | | | | |
| Dysentery ... | | | | | | | | |
| 3.—MALARIAL DISEASES. | | | | | | | | |
| Remittent Fever ... | | | | | | | | |
| Ague ... | | | | | | | | |
| 4.—ZOOGENOUS DISEASES. | | | | | | | | |
| Cowpox and effects of Vaccination ... | | | | | | | | |
| Other Diseases (e.g., Hydrophobia, Glanders, Splenic Fever) | | | | | | | | |
| 5.—VENEREAL DISEASES. | 4 | | | | | | 4 | 1 |
| Syphilis ... | | | | | | | | |
| Gonorrhoea, Stricture of Urethra ... | | | | | | | | |
| 6.—SEPTIC DISEASES. | | | | | | | | |
| Erysipelas ... | 1 | | | 1 | | | 2 | 1 |
| Pyæmia ... | 1 | | | | | | 2 | |
| Puerperal Fever ... | | | | | | | | |
| Tetanus ... | | 2 | | 1 | | | 3 | |
| Other Allied Diseases ... | | | | | | | | |
| II. PARASITIC DISEASES. | | | | | | | | |
| Thrush and other Vegetable Parasitic Diseases... | | | | | | | | |
| Worms, Hydatids and other Animal Parasitic Diseases ... | | | | | | | | |
| III. DIETETIC DISEASES. | | | | | | | | |
| Want of Breast Milk, Starvation ... | | | | | | | | |
| Scarvy ... | | | | | | | | |
| Chronic Alcoholism ... | | | | | | | | |
| Delirium Tremens ... | | | | | | | | |
| IV. CONSTITUTIONAL DISEASES. | | | | | | | | |
| Rheumatic Fever, Rheumatism of the Heart | | | | | | | 1 | 1 |
| Rheumatism ... | | | | | | | | |
| Gout ... | 3 | 1 | | | | | | |
| Rickets ... | | | | | | | | |
| Cancer, Malignant Disease ... | | | | | | | | |
| Sarcoma ... | | 3 | | | | | | |
| Tubercular Meningitis, Hydrocephalus | 1 | 1 | | | | | 6 | 14 |
| Epilepsy ... | | 1 | 1 | | | | 3 | 5 |
| Other forms of Tuberculosis, Scrofula | 2 | 2 | 3 | | | | 11 | 7 |
| Purpura, Hemorrhagic Diathesis ... | | | | | | | 22 | 27 |
| Anæmia, Chlorosis, Leucocythæmia | | | | | | | 3 | 3 |
| Glycosuria, Diabetes Mellitus ... | | | | | | | 3 | 5 |
| Other Constitutional Diseases ... | | | | | | | 3 | 3 |
| V. DEVELOPMENTAL DISEASES. | | | | | | | | |
| Premature Birth ... | 18 | | | | | | 18 | 28 |
| Atelectasis ... | 2 | | | | | | 4 | 2 |
| Congenital Malformations ... | 1 | | | | | | 1 | 7 |
| Old Age ... | | | | | | | 34 | 37 |
| VI. LOCAL DISEASES. | | | | | | | | |
| 1.—DISEASES OF NERVOUS SYSTEM. | | | | | | | | |
| Inflammation of Brain or Membranes | 1 | 1 | | | | | 4 | 7 |
| Apoplexy, Softening of Brain, Hemiplegia, | | | | | | | | |
| Brain Paralysis ... | | | | | | | 37 | 23 |
| Insanity, General Paralysis of the Insane | | | | | | | 20 | 2 |
| Epilepsy ... | 8 | 4 | | | | | | |
| Convulsions ... | | | | | | | 12 | 9 |
| Laryngismus Stridulus (Spasm of Glottis) | | | | | | | 1 | 1 |
| Disease of Spinal Cord, Paraplegia, Paralysis | | | | | | | 4 | 7 |
| Other Diseases of Nervous System ... | 1 | 1 | | | | | | |
| 2.—DISEASES OF ORGANS OF SPECIAL SENSE. | | | | | | | | |
| (e.g., of Ear, Eye, Nose) | | | | | | | | |
| 3.—DISEASES OF CIRCULATORY SYSTEM. | | | | | | | | |
| Pericarditis ... | | | | | | | | |
| Acute Endocarditis ... | | | | | | | | |
| Valvular Diseases of Heart ... | | | | | | | | |
| Other Diseases of Heart ... | | | | | | | | |
| Anæmism ... | 1 | | | | | | | |
| Embolism, Thrombosis ... | | | | | | | | |
| Other Diseases of Blood Vessels | | | | | | | 2 | 3 |
| 4.—DISEASES OF RESPIRATORY SYSTEM. | | | | | | | | |
| Laryngitis ... | | 1 | | | | | 1 | 1 |
| Group Croup (spasmodic) ... | | 1 | | | | | 1 | 1 |
| Emphysema, Asthma ... | 16 | 3 | | | | | 2 | 6 |
| Bronchitis ... | 4 | 3 | 2 | | | | 9 | 44 |
| Pneumonia ... | 5 | 8 | 1 | | | | 18 | 26 |
| Broncho-Pneumonia ... | | | | | | | 5 | 3 |
| Pleurisy ... | | | | | | | 17 | 23 |
| Other Diseases of Respiratory System | | | | | | | 2 | 2 |
| 5.—DISEASES OF DIGESTIVE SYSTEM. | | | | | | | | |
| Dentition ... | 1 | | | | | | 1 | 2 |
| Sore Throat, Quinsy ... | 1 | 2 | | | | | 6 | 4 |
| Diseases of Stomach ... | 9 | 2 | | | | | 16 | 10 |
| Enteritis ... | 1 | 1 | | | | | 5 | 7 |
| Obstructive Diseases of Intestines | | | | | | | 2 | 3 |
| Peritonitis ... | | | | | | | 1 | 1 |
| Ascites ... | | | | | | | 4 | 5 |
| Cirrhosis of Liver ... | 1 | | | | | | 4 | 3 |
| Jaundice and other Diseases of Liver | | | | | | | 2 | 2 |
| Other Diseases of Digestive System | | | | | | | 3 | 3 |
| 6.—DISEASES OF LYMPHATIC SYSTEM. | | | | | | | | |
| (e.g., of Lymphatics and of Spleen) | | | | | | | | |
| 7.—DISEASES OF GLAND-LIKE ORGANS OF UNCERTAIN USE. | | | | | | | | |
| (e.g., Bronchiolæ, Addison's Disease) | | | | | | | | |
| 8.—DISEASES OF URINARY SYSTEM. | | | | | | | | |
| Nephritis ... | | | | | | | | |
| Bright's Disease, Albuminuria | | | | | | | 8 | 39 |
| Disease of Bladder or of Prostate ... | | | | | | | 7 | 2 |
| Other Diseases of the Urinary System | | | | | | | 10 | 24 |
| 9.—DISEASES OF REPRODUCTIVE SYSTEM. | | | | | | | | |
| A. Of Organs of Generation. | | | | | | | | |
| Male Organs | | | | | | | | |
| Female Organs | | | | | | | | |
| B. Of Parturition. | | | | | | | | |
| Abortion, Miscarriage ... | | | | | | | | |
| Puerperal Convulsions ... | | | | | | | | |
| Placenta Prævia, Flooding | | | | | | | | |
| Other Accidents of Child Birth | | | | | | | | |
| 10.—DISEASES OF BONES AND JOINTS. | | | | | | | | |
| Caries, Necrosis ... | | | | | | | | |
| Arthritis, Osteitis, Periostritis | | | | | | | | |
| Other Diseases of Bones and Joints | | | | | | | | |
| 11.—DISEASES OF INTEGUMENTARY SYSTEM. | | | | | | | | |
| Carbuncle, Phlegmon ... | | | | | | | | |
| Other Diseases of Integumentary System | | | | | | | | |
| VII. DEATHS FROM VIOLENCE. | | | | | | | | |
| 1.—ACCIDENT OR NEGLIGENCE. | | | | | | | | |
| Fracture and Contusions | | | | | | | | |
| Gunshot Wounds ... | | | | | | | | |
| Cut, Stab ... | | | | | | | | |
| Burn, Scald ... | | 1 | | | | | | |
| Poison ... | | 1 | | | | | | |
| Drowning ... | | | | | | | | |
| Suffocation ... | 1 | | | | | | | |
| Otherwise ... | | | | | | | | |
| 2.—HOMICIDE. | | | | | | | | |
| Manslaughter ... | | | | | | | | |
| Murder ... | | | | | | | | |
| 3.—SUICIDE. | | | | | | | | |
| Gunshot Wounds ... | | | | | | | | |
| Cut, Stab ... | | | | | | | | |
| Poison ... | | | | | | | | |
| Drowning ... | | | | | | | | |
| Hanging ... | | | | | | | | |
| Otherwise ... | | | | | | | | |
| 4.—EXECUTION. | | | | | | | | |
| Hanging ... | | | | | | | | |
| VIII. DEATHS FROM ILL-DEFINED AND NOT SPECIFIED CAUSES. | | | | | | | | |
| Dropsy ... | | | | | | | | |
| Debility, Atrophy, Inanition | | | | | | | | |
| Mortification ... | 20 | | | | | | | |
| Tumour ... | | | | | | | | |
| Abscess ... | | | | | | | | |
| Hæmorrhage ... | | | | | | | | |
| Natural Causes ... | | | | | | | | |
| Sudden Death (cause not ascertained) | | | | | | | | |
| Causes not specified or ill-defined | | | | | | | | |
| TOTALS | 124 | 58 | 14 | 24 | 194 | 121 | 536 | 536 |

